THE MEDICAL NEWS.

A WEEKLY JOURNAL OF MEDICAL SCIENCE.

VOL. LXI. SATURDAY, JULY 16, 1892. No. 3.

ORIGINAL ARTICLES.

PULMONARY PHTHISIS IN ITS RELATION TO INSANITY AND TO OTHER NEUROSES.[1]

BY THOMAS J. MAYS, M.D

PROFESSOR OF DISEASES OF THE CHEST IN THE PHILADELPHIA POLYCLINIC, AND VISITING PHYSICIAN TO THE RUSH HOSPITAL FOR CONSUMPTION, OF PHILADELPHIA.

DURING recent years I have been devoting a good deal of attention to the study of the nervous nature of pulmonary phthisis, and have latterly given expression to my views on this subject in a brochure entitled *Pulmonary Consumption a Nervous Disease*. In this publication I said all that I deemed necessary to say at that time. Continued research in the same field has, however, not only served to confirm my previous opinion, but shows that a more intimate relation exists between pulmonary phthisis and the ordinary neuroses than I then conceived, so that I have for some time been thinking of gathering the evidence of this relationship for further publication. This I would hardly have undertaken so soon if, in the meantime, there had not appeared a book which, on account of its broad generalizations and scientific deductions, stamp it, in my opinion, as one of the most philosophic works that has been issued from the medical press for a long while. This work is Dr. Clouston's book on *The Neuroses of Development*, and to it must be chiefly ascribed, not only the inspiration and incentive of what I shall say to-day, but also much of the matter that makes up the body of this paper.

The clinical association between mental diseases and phthisis has been noticed by many authors, among whom are Van der Kolk, Esquirol, Georget, Burrows, Ellis, McKinnon, Clouston, Boyd, Savage, Norman, and others. The illustrious Laennec, who himself fell a victim to phthisis, says (*Treatise on Mediate Auscultation*, Paris, 1822) that he knew of no more certain cause of this disease than profound or prolonged grief or melancholy. From various sources we learn that phthisis is about three times as prevalent among the insane as among the sane, the mortality among the former being estimated at 20 per cent. By some this high death-rate is attributed to the confinement incidental to asylum-life, but this relation is, after all, more apparent than real, for Boyd (*Journal of Mental Science*, vol. xv, p. 196) shows that out of 147 insane that died of phthisis in the Somerset Asylum, there was a slight increase (4.7 per cent.) in the death-rate of the females that were longest confined; while, on the other hand, there was a slight decrease in the death-rate (3.6 per cent.) of the male inmates that were longest confined.

All observers, so far as I am aware, are agreed in the opinion, too, that the insanity is a precursor of the phthisical affection among the insane. This explains why, as Clouston remarks, insanity is not more frequently found in hospitals for pulmonary consumption.

Not only is phthisis more common among the insane than it is among the general population, but facts show that this disease has a predilection for certain forms of insanity. Thus, it is more likely to occur in the depressed than in the exalted types of insanity. Clouston says that this is especially true of melancholia, when combined with the monomania of suspicion, and that sooner or later nearly all these cases die of pulmonary phthisis. Riva and Sulphide (*London Medical Record*, 1879, p. 479) also state that phthisis is more common in melancholia than in any other form of insanity; but it is also found in general paralysis, or paretic dementia, for Sir J. Crichton Browne (*Brain*, vol. vi, p. 317) states that phthisis existed in 25 per cent. of cases of general paralysis examined after death. My own observation leads me to believe that general paralysis, or paretic dementia, is not infrequently associated with phthisis. This opinion is based on an analysis of the statistics of the Department of the Insane in the Philadelphia Hospital, which was made with the assistance of my friend, Dr. Charles Wirgman.

The Ages of Greatest Prevalence of Pulmonary Phthisis and Insanity.—The most superficial examination of mortality statistics makes it clear that the human constitution is more vulnerable to phthisis at certain periods of life than at others, although it is true that those who inherit the disease die three years earlier than those who acquire it. This is true, whether the disease affects the lungs, the brain, the bones, or any other portion of the body. Thus, in 17,711 cases of phthisis collected from the Health Reports of the City of Philadelphia and of Rhode Island, I find that the greatest mortality among these prevailed between the ages of twenty and thirty. In regard to tuberculous

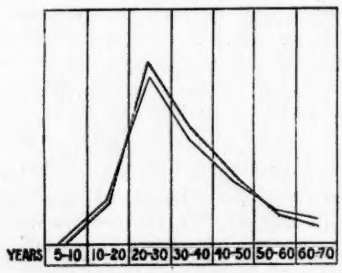
[1] Read before the meeting of the American Neurological Association, New York, June 24, 1892.

meningitis, Dr. James shows (*Pulmonary Phthisis*, p. 4) that the percentage of deaths from this disease is the heaviest in the twelfth month of infancy, and sinks to a minimum after the third year.

Turning now to an inquiry into the morbidity-rate of insanity, we find that this condition not only pursues a similar course in regard to periodicity, but that this periodicity corresponds precisely with that of pulmonary phthisis. Thus, James (*Ibid.*, p. 41) shows by a curve based on 3985 inmates of the Morningdale Lunatic Asylum of Scotland, that the greatest number of lunacy cases develop between the ages of twenty-five and thirty-five. The *Report of the Pennsylvania Hospital for the Insane*, for the year 1888, gives the ages at which insanity first appeared in 9543 patients, and showing the greatest prevalence of insanity to be between twenty and thirty years.

I have constructed a chart, showing the prevalence of phthisis and insanity at various life periods, in the total number of cases reported in the statistics quoted, and from this a comparative view of the course of the two diseases is readily obtained:

FIG. 1.



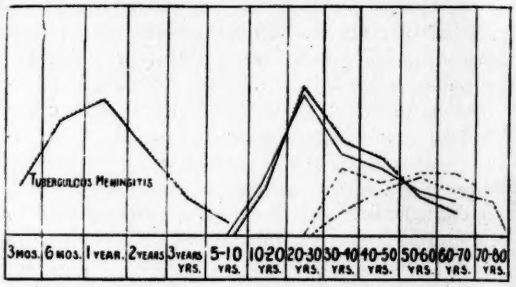
The comparative courses of pulmonary phthisis and insanity at various stages. The dotted line represents the curve of pulmonary phthisis or consumption, and the solid line that of insanity. The cases of pulmonary consumption on which the dotted line is based, numbering 17,711, are derived from the sources indicated. The cases of insanity on which the solid line is based, numbering 9543, are obtained from the *Report of the Pennsylvania Hospital for the Insane*, for 1888.

A most interesting feature is brought out in this connection, if the various ages at which tuberculous meningitis mostly flourishes are contrasted in a graphic manner with those at which pulmonary tuberculosis and insanity are most prevalent, as will appear from the accompanying representation.

From this it will be seen that tuberculous meningitis affects early infancy almost exclusively; that pulmonary consumption and insanity occur at a time when tuberculous meningitis ceases to occur, and pursue a parallel course throughout their continuance. The significance of these curves will receive interpretation when the influence of development in the etiology of disease is considered.

The Influence of Heredity in the Causation of Pulmonary Consumption and Insanity.—That the neurotic tendency breeds pulmonary consumption in the offspring has been recognized since the days of Moreau. Hysteria, chorea, epilepsy, etc., are often intermingled with pulmonary consumption in different generations of the same family. The same is true concerning insanity. Clouston (*Neuroses of Development*, p. 91) tells us that pulmonary consumption and insanity are common in different members of the same family, and a tuberculous heredity may determine insanity, and *vice versâ*.

FIG. 2.



1. ——— Phthisis. 3. - - - - - Chronic Nephritis.
2. ——— Insanity. 4. ——— Carcinoma.

Dr. James, in referring to the subject of heredity, states (*Pulmonary Phthisis*, p. 109) that "If we compare phthisis with diseased conditions which all observations show are quite independent of micro-organisms, as insanity, very close resemblances are found." He, furthermore, says that Thompson has demonstrated the truth of this (*Family Phthisis*, p. 132) by comparing smallpox and syphilis with insanity and phthisis as follows:

	Smallpox.	Syphilis.	Insanity.	Phthisis.
Transmission.	Through mother only.	Through either parent.	Through either parent.	Through either parent.
Time of appearance.	Closely on disease in mother	Closely on disease in parents	Not always closely on disease in parents	Not always closely on disease in parents
Protective or not.	Is protective.	Is protective.	Is not protective, but predisposing.	Is not protective, but predisposing.
Atavism	Unknown.	Unknown.	Rather frequent.	Rather frequent.
Ultimate effects.	Extinction of the disease.	Extinction of the disease.	Extinction of the family.	Extinction of the family.

Commenting on these phenomena, Dr. James declares that "here the resemblance between phthisis and insanity is as complete as is their distinction from smallpox and syphilis, and this comparison indicates that whilst such diseases as smallpox and syphilis must be looked upon as being the results of

some foreign growths implanted in the body, as in a soil, and there passing through the various stages of their life-history, insanity and phthisis may be regarded rather as being the results of some peculiar modification of the body itself, the nature of which we do not understand, but which we vaguely term deficient vitality."

Asthma and Pulmonary Phthisis. — Although asthma is a well-recognized disease, its life-history has not been investigated with the thoroughness that its importance demands. This is particularly true with regard to the tendency through which it produces death. The question then is, Of what do asthmatics die? Do they die of asthma, or of some other disease, and if so, what is the relation between the asthma and the disease of which they die? Asthmatics are supposed to be long-lived, but of this I cannot find any corroborative evidence, either in the experience of others or in that of myself. I do not refer to those exceptional cases that undergo spontaneous cure in the later years of life, but to those in whom the attacks incline to become continuous as life advances. Text-books on the practice of medicine, and even most of the special treatises on this subject give no satisfactory answer, but evidence can be gathered to show that asthma naturally develops into pulmonary consumption. Fuller (*Diseases of the Chest*, 1862) states that, in spite of the belief that asthma and pulmonary consumption are antagonistic, many asthmatic patients die of the latter disease. Williams (*Pulmonary Consumption*, 1887, p. 317), in tracing the origin of 385 cases of pulmonary consumption, shows that seven began with spasmodic asthma. On page 61 of the same work he says that the tendency of asthmatic parents to have tuberculous children is hardly sufficiently recognized. James (*Pulmonary Phthisis*, p. 57) asserts that asthma and whooping-cough are likely to predispose to or terminate in pulmonary phthisis. In my own experience I have seen four cases of asthma that developed into pulmonary consumption, and of these two died. It appears that the danger of asthma lapsing into pulmonary consumption only begins when the attacks of the former follow in such close succession that the irritation produced by the preceding paroxysm has not had time to subside; this is not the case when the attacks recur after long periods of intermission. It seems, therefore, that it is more or less an accumulation of the effects of asthma that develop the phthisical state, the danger of which is averted when sufficient time elapses between the attacks for these morbid effects to pass off.

These facts tend to demonstrate, then, that asthma is closely associated with consumption on the one hand, and I think the instances that follow will make it clear, too, on the other hand, that asthma is closely related to insanity. Clouston (*Neuroses of Development*, p. 65), after defining asthma as a neurosis of the pneumogastric center, says that it often disappears, and is superseded by other nervous diseases, and that its alternation with mania, chorea, and hysteria, is quite common. On looking up the subject of the alternation between asthma and insanity, I have found a number of additional cases to those related by Dr. Clouston in his various writings, and, on account of their great interest, I shall present a short abstract of them.

CASE I.—(Kelp, *Zeitschrift f. Psych.*, xxix, 4.) M., a male, twenty-eight years old, with a family history of insanity on both sides, became asthmatic at twenty-one; he took large doses of morphine and chloral. After some time the asthma disappeared entirely, and was superseded by mania. He presented extreme depression and anxiety, amounting to desperation, accompanied by a delusion that he was being poisoned. After a time the asthma reappeared, and the mental condition gradually improved.

CASE II.—(Dr. Lorent, *Ibid.*) A male adult, who had long suffered from asthma, fell ill of melancholia, when his chest-troubles vanished. Nine months afterward he recovered from the mental affection, and the asthma returned. A year after this the chest-troubles disappeared again, and the melancholia recurred.

CASE III.—(Dr. H. B. Nunemaker; private communication.) A male, fifty-five years old, presented paroxysmal mania for about four weeks, when attacks of spasmodic asthma came on, and displaced the mania. These alternations occurred once in about eighteen months, and took place three times while the patient was under observation.

CASE IV.—(Dr. J. C. Stevens; private communication.) An intemperate male adult was asthmatic for ten years, after which he became insane. He had various delusions, and was subject to paroxysms of abuse and excitement. Occasionally, in the midst of these, an attack of asthma, lasting for a few days, would come on. At these times he was apparently sane. After the asthma disappeared, the mania returned. Finally, the asthma became more or less constant, and the patient remained sane.

CASE V.—(Conolly Norman, *Journal of Mental Science*, vol. xxxi, p. 1.) A female, forty-five years old, suffered from asthma for twenty years. Three months before she came under observation her asthma ceased suddenly, and she became restless, anxious, and melancholic. In two and a half years her asthma returned, but her mental condition did not improve.

CASE VI.—(*Ibid.*) A male, thirty-two years old, had asthma from childhood. The asthma ceased, and he became gloomy, irritable, and was haunted by the thought that he was to kill his mother. A fortnight after admission to hospital he had an attack of asthma. He at once improved. He became cheerful, the asthma recurred frequently, but his mental condition remained undisturbed.

CASE VII.—(*Ibid.*) A male, about twenty years old, had asthma for some time before he became insane. After being confined in an asylum for three years he became perfectly calm, and the asthma returned; from this he suffered for years. The asthma was not observed when he was maniacal.

CASE VIII.—(*Ibid.*) A female, at the age of thirty, became asthmatic, and suffered until she was about forty, when, on account of some financial distress, she became insane—suffering from delusions of suspicion. After about six months' seclusion, her mind cleared up. During this time she had no asthma. Her asthma returned, but so far as known she had no recurrence of insanity.

CASE IX.—(*Ibid.*) A male, thirty years old, had been a sufferer from asthma for many years. Two years before admission to hospital the asthma became less severe, and his friends date his insanity from that time. After being confined for a year or more, his mind gradually cleared up, and the asthma returned in a severe form. The chronic, calm condition of partial dementia was well established before the onset of the asthma, and the mind remained unchanged.

CASE X.—(Clouston, *Neuroses of Development*, p. 122.) A female became asthmatic at thirteen years of age. At thirty-seven she became melancholic, with delusions, and the asthma ceased.

CASE XI.—(*Ibid.*, p. 24.) A boy, one year old, had an attack of infantile paralysis, followed by impairment of growth of the bones and muscles, with weakness and contracture of the right arm, and lameness of the right leg. At puberty he became asthmatic; at nineteen the asthma ceased, and he had a severe attack of melancholia, attended with excitement. This lasted for six months, before and during which time he became thin and anemic. As the melancholia passed off the nutrition improved, and the asthma returned.

Commenting on this case, Dr. Clouston says: "What was the significance of the asthma—a spasmodic explosive condition, probably, of the pneumogastric centers—coming on at puberty, and of the excited melancholia at nineteen? Why were the lower and nutritive centers affected first, during the most active period of growth?—and then the respiratory centers?—and then, in order, the mental centers during the reproductive and higher mental development? And why did the asthma cease when the melancholic attack came on? Why was there a failure in the nutritive power of the whole body, as seen by the loss in weight and want of appetite before the melancholia began? Why did he recover from the melancholia instead of passing into dementia, as so many cases of adolescent insanity do? Why did the asthma return? Did its return save him from dementia?"

Although the phenomenon is less frequent and less pronounced, yet there is evidence to show that it is possible for a similar interchange, or at least a transmutation, to occur between insanity and phthisis as there is between insanity and asthma, as is attested by the following short histories:

CASE I.—(Dr. Ray, *American Journal of Insanity*, 1862, vol. xix, p. 40.) A female presented symptoms of pulmonary disease, and soon after cerebral symptoms. She became so excited that she was sent to an asylum. The excitement abated under treatment, and she went home as rational as ever, but the pulmonary disease returned, and she subsequently died of pulmonary phthisis.

CASE II.—*Schmidt's Jahrbücher*, suppl., 1847, p. 72.) A male, twenty-five years old, made a slow recovery from pneumonia. In the following year all objective signs of the pulmonary disease had disappeared. He then became melancholic, and his head was turned spasmodically to the right. He finally died with dyspnea and dysphagia. On examination his brain was found congested and edematous, and there was a cavity in the apex of the right lung.

CASE III.—(Dr. Edward N. Brush; private communication.) A female, twenty-one years old, became melancholic, and received asylum treatment for nine months. During this time she improved, and became perfectly rational during the last three months of her hospital-residence. There was now observed an evening rise of temperature, and an infiltration at the apices of the lungs. She rapidly sank from consumption, but there was no recurrence of melancholia.

CASE IV.—(*British and Foreign Med.-Chirurg. Review*, lix, 59, p. 117.) Dr. Vosin relates the case of a female who, after suffering from melancholia, with stupor, for four years, was attacked with pulmonary consumption but recovered from her insanity.

These cases give still further proof of the close alliance between insanity and pulmonary phthisis.

Idiocy and Phthisis.—Of all the nervous diseases none is more frequently associated with pulmonary phthisis than idiocy. Indeed, this intimacy is so strongly maintained that one is tempted to be skeptical until the statistics on the subject are fully examined. Thus, Dr. Langdon Down, physician to the Earlswood Asylum for Idiots, says (*Mental Affections of Childhood and Youth*, p. 221), that "the statistics of London show that the deaths from phthisis constitute 115 per 1000 of the general mortality. My notes of the causes of death at Earlswood indicate that phthisis was the actual cause of death in 398 per 1000 of the general mortality. . . . . I have made an analysis of the last hundred of my post-mortem records, and I find that no fewer than 62 per cent. were subjects of tubercular deposit. . . . In several of the cases included in the above record, most careful inquiry failed to discover any family history of tuberculosis. . . . In these cases the tuberculosis appears to have been the sequence of idiocy. . . . Defective innervation, in all probability, led to mal-

nutrition, and predisposed to a tubercular condition. . . . On the other hand, in a large number of cases the progenitors had also manifested a tubercular condition; and in some the tuberculosis of the parents had been, in my opinion, the prime cause of the idiocy of the offspring."

Dr. Isaac N. Kerlin, Superintendent of the Pennsylvania Institution for Feeble-minded Children, in an essay on the Classification and Causation of Idiocy (*Transactions of the Pennsylvania State Medical Society*, 1889, vol. xiii, part i, p. 161), states that "the tables presented with this paper, if prepared by a special advocate to prove that consumption is the main factor in the generation of idiocy, could not be more startling. As they are the result of careful inquiry, without any theory to prove or disprove, I ask for them your respectful judgment in this, as in other details which they present."

In the table to which he refers he gives the histories of 100 families, in each of which there was a case of idiocy. A careful examination of this table shows that 145 members of these families, including parents, sisters, and brothers, and grandparents, were afflicted with pulmonary consumption, 25 with insanity, and 21 with epilepsy. Dr. Down (*op. cit.*, p. 190) contributes the histories of 20 families, each of which was burdened with idiocy, and among the parents, sisters and brothers, grandparents, uncles and aunts, there were 35 who suffered from pulmonary consumption, 10 from insanity, and 3 from epilepsy. The great prevalence of pulmonary consumption among families that contain idiots is, however, no more startling than is its prevalence where hysteria exists. Thus, Professor Grasset (*Brain*, vols. vi and vii) found that among the parents, brothers and sisters, grandparents, and uncles and aunts, of 44 hysterical patients, there were 60 that were phthisical, 5 insane, and 2 epileptic. In order to grasp the enormous mortality from pulmonary phthisis among the members of families burdened with these neuroses, let us compare their death-rate with that which obtains among the members of families believed to be in good health, with no special predisposition to nervous disorders. Thus, if we take in order 1000 applicants for life-insurance (all not insured, for a number of these were rejected) as they are entered on the record-book in a life-insurance office, as I have done, we shall find that among the members of their families only 176 were consumptive, 9 insane, and 4 epileptic. By tabulating these figures in percentages, *i. e.*, by obtaining the proportion between the members of each hundred families represented and the number of sufferers from pulmonary consumption, insanity, and epilepsy, the contrast between the normal and the abnormal will be brought out in a most striking manner.

A comparison of these figures demonstrates that the death-rate from pulmonary tuberculosis is from eight to ten times as great among families of the neurotic class as it is among those of the healthy population. Not only is this an enormous death-rate, but, from further inquiry, it appears that, at least among the idiotic class, pulmonary consumption occurs earlier in life than it does among the general population or among the insane. Thus, it has been demonstrated that the greatest general mortality of consumption takes place between the ages of twenty and thirty; but in Dr. Down's record of 80 idiots that died of phthisis, the highest mortality-period is between ten and twenty years, showing that congenital or infantile disease of the brain and nervous system is capable of causing the greatest mortality-period of pulmonary consumption to appear ten years earlier than it otherwise would.

Among parents, brothers and sisters, grandparents, uncles and aunts of	Phthisis.	Insanity.	Epilepsy.
	Per cent.[1]	Per cent.	Per cent.
1000 life-insurance applicants .	17.6	0.9	0.4
Dr. Kerlin's 100 families that produced idiotic children (aunts and uncles not included) . .	145	25	21
Dr. Down's 20 families that produced idiotic children . . .	175	35	15
Prof. Grasset's 44 families burdened with hysteria	136	11.36	4.50

[1] As already defined.

In concluding this interesting chapter on idiocy, Dr. Down states: "It appears to me that tuberculosis must be accepted as one important cause of idiocy; that it impresses special characters thereon which impart a strong family likeness to the subjects of this class. It is no less clear to me that idiocy of a non-tubercular origin leads to tuberculosis. Whether this arises through the influence of the pneumogastric nerve, mal-assimilation of food, or defective innervation, it cannot but be regarded that the connection between these two maladies is by no means accidental, and that a due appreciation of this relation is necessary to those who would treat effectively congenital mental lesions."

Now, what interpretation can be given to these facts? Only one, so far as I can see, viz., that pulmonary phthisis and insanity belong to the same family-group of diseases. In order to comprehend this statement in its fullest extent, it must be borne in mind that that period in the life of an organ during which it undergoes development, either in structure or in function, marks a crisis in its history, and is the time when it is especially susceptible to disease. This point is particularly insisted on by Dr. Clouston, and it is in perfect accord with physiologic law. He holds that all true cases of epilepsy

arise almost exclusively during the growth and development of the brain. The first period is that of the most rapid brain-growth—from birth to seven years of age—and the second is that of slow brain-growth, but rapid development, the early reproductive period, from thirteen to eighteen years of age. In the great majority of instances chorea occurs between the ages of six and fifteen, the period of life when motion and emotion become coördinated. Megrim is a sensory neurosis that almost never appears before seven, or later than twenty five years of age. According to James, tuberculous meningitis is comparatively infrequent during the first months of life, reaches its maximum about the end of the first year, and then declines rapidly; the maximum, in all probability, corresponds with the time when the trophic and organic functions of the brain are most actively evolved.

The greatest prevalence of insanity—which is between twenty and thirty years—does not correspond with the maximum development of the structure of the brain, for this, as has been stated, takes place before the age of seven, and practically ceases at the age of twenty-five. It does tally, however, with that period in life at which the brain and nervous system undergo the most varied, intense, and complex development in function; for between twenty and thirty a new vista is opened to man. It is the period in which he is compelled to face untried and unsolved problems. He is removed from paternal protection, and left to struggle for his own existence in the battle of life. He becomes burdened with family cares and duties. He is exposed to overwork, business vicissitudes, mental anxiety and perplexities, domestic troubles, grief, disappointment, vicious habits, indulgences, intemperance, syphilis, and many other pernicious influences—influences that, by operating on a brain of either inherited or acquired instability, are known to be among the most prolific causes of insanity.

Pulmonary consumption, on superficial inspection, has apparently nothing, in a pathologic sense, in common with insanity, but on deeper examination the former proves to be a perfect analogue of the latter. Phthisis manifests itself during the developmental, and not, like carcinoma and chronic nephritis, during the degenerative period of life, and causes one-seventh of all of the deaths among the human race. It has been shown that the other diseases that arise during the corresponding period do so by reason of some structural or functional change in the organs affected, as a result of which susceptibility of these organs to disease is increased. Is this true of the lungs, in so far as they stand related to phthisis? Clouston is inclined to the opinion that there is present a trophic disturbance of development of the alveolar epithelium at the age at which phthisis is common, as a result of which a nidus is created for the lodgment and propagation of the tubercle-bacillus. With deference to this high authority, I am constrained to differ with him on this point. It is well known that the alveolar epithelium appears to be of a hybrid character, that it is most unstable, and has a much greater inherent susceptibility to disease during infancy than during any subsequent period; but so far as I am able to discern, there is no histologic or physiologic evidence to show that any development occurs in this structure at the time when pulmonary phthisis predominates; nor is there any proof that the lungs, as a whole, undergo growth in any respect during adult life. There being no such changes detectable in the respiratory organs, or in any of their component tissues, excepting in their nerve-supply, it becomes pertinent to inquire whether pulmonary phthisis is not primarily due to nerve-degeneration, and whether there is proof to substantiate this proposition.

Notwithstanding the great advance in the modern study of the neuroses, the pathologic relationship between the lungs and their nerve-supply has been practically ignored. The lungs are innervated by the largest and most important nerves in the body; yet, strange to say, nearly all of the diseases incidental to these organs are at present attributed to the influence of irritants and excitants introduced from without, and the possibility that the fault may reside in this nerve does not even receive serious consideration. It is not so in disease of other organs. When, for example, an arm or a leg refuses to perform its function, or fails in its nutrition, immediate inquiry is directed to the state of its nerve-supply. In disease of the eye, the condition of the optic nerve is carefully investigated. Inflammation and ulceration of the skin and subjacent tissues are known to be frequently due to disease of, or injury to, the nerves that supply these parts. A multitude of other instances might be given to illustrate the close dependence of the diseases of many organs on lesions of the nervous system.

Experiments, almost without number, demonstrate that section of, or injury to, the pneumogastric nerves of animals, is followed by degeneration of the lungs, as manifested by edema, hyperemia, splenization, hemorrhages, and emphysema—in fact, all of the elements of catarrhal or cheesy pneumonia. Professor Schiff, who has been largely interested in this subject, succeeded in developing both hepatization and tuberculization in the lungs of rabbits by irritating and injuring the pneumogastric nerves. In a series of experiments with rabbits, by wrapping the pneumogastric nerve of one side in cotton-wool saturated with glycerin, replacing it, and stitching the edges of the wound

together, I found that hepatization developed in every case, associated in one instance with yellow tuberculization.

It is true that this condition is known as "Schluck" pneumonia, implying that it is brought about by the entrance of mucus and particles of food into the trachea and bronchi of animals, in consequence of the paralysis of the pharynx and larynx produced by the operation. This view does not, however, seem to be correct, for Arusperger (*Virchow's Archiv*, vol. ix, pp. 197 and 437) has shown that if, after section of the nerves, a tube is inserted in the trachea, and the admission of foreign bodies into the lungs is prevented, the same pulmonary changes occur.

It is not necessary, however, to appeal to experiments on animals alone, in order to demonstrate that lesions of the pneumogastrics are capable of producing lung-disintegration, for there are many instances recorded in which pulmonary consumption in the human subject resulted clearly from disease of these nerves. In my brochure, already referred to, I submit the histories of eighty-one cases of pulmonary consumption associated with demonstrated disease of the vagus. In every instance these nerves were either compressed by aneurisms, enlarged glands, tumors, etc., or interfered with by other causes; and while it is hard to establish the fact that the lung-disease followed the nerve-lesion in every instance, this was undoubtedly the sequence in the vast majority of cases. In discussing the anatomic aspects of two of the cases included in my list, the late Sir William Gull referred to this very subject in the following language: "These cases afford an excellent illustration of the effects which are referable to paralysis of the pulmonary plexus on one side, accumulation of muco-purulent secretion in the paralyzed bronchi, subsequent dilatation of the tubes at their peripheral distribution, concomitant exudation into the air-cells, hepatization, and at length disintegration of tissue on the other. . . . It is one of the evils of a too exclusively humoral pathology (1859) that leads us to overlook the minute anatomical relations of disease, which are in themselves often a key to the sequence of morbid changes. These cases illustrate this proposition, for the possible local effects on the lung of injury to the pneumogastric and pulmonary plexus being recognized, whenever cause for that injury exists we may anticipate its results, and are not wholly dependent upon physical examination, as we are if we limit our pathological view to the mere changes in the lung, without considering how they are produced."

In making comments on one of his cases, to which I also refer in my list, Dr. Wilks, of London, expresses himself in a similar strain when he says: "It has been said that the patient died of phthisis, and the tumors were found accidentally; but, in all probability, the affection of the nerves—that is, of the pneumogastric—was the cause of the pulmonary disease, and, therefore, so far from neuroma being a harmless affection, it was the cause of the girl's death. This idea was suggested by the observation of several other cases of lung disease occurring in connection with disease of these nerves, particularly as witnessed in aneurism of the aorta and cancer of the esophagus. In these diseases death is often brought about by the pulmonary affection, and the pneumogastric nerves are found implicated in the disease, or pressed on by the tumor."

A brief analysis of my recorded cases develops the fact that twenty-nine show, as clearly as anything can be shown, that the phthisical degeneration was the result of a primary local disorganization of the vagi, due to the pressure of aneurisms, tumors, enlarged glands, etc., on these nerves. Here we possess all the requirements and conditions of a perfect experiment, such as we aim to secure in animals; and, unless we assume that pulmonary consumption preceded the local pressure on the vagi—a view that is not confirmed by anything that appears in the histories of the cases — we are bound to accept the proposition that phthisis is a direct sequence of disease of the vagus. In twenty other cases disease of the vagus and pulmonary phthisis were associated with various nervous affections, such as multiple neuritis, tabes dorsalis, bulbar paralysis, etc., and in each of these there is every reason to believe that the pulmonary lesions were secondary to disintegration of the vagi. In eighteen others it is shown that pulmonary consumption was the result of disease of the vagus engendered by the pernicious influence of alcohol and syphilis. In fourteen other cases pulmonary consumption and disease of the vagus were associated with diabetes and epilepsy. In my brochure I also tabulate the histories of sixty cases in which pneumonia, bronchitis, etc., coëxisted with well-ascertained disease of the vagi. Moreover, Drs. Bianchi and Armandi (*Neurolog. Centralblatt*, 1884, p. 452) found the vagi diseased in eleven paralytics that had died of pneumonia; and Dr. Bianchi, in a more recent contribution to this subject (*Neurolog. Centralblatt*, 1890, p. 249), states that in a number of paralytics, that had died of pneumonia, he was able to trace a primary degenerative atrophy of the vagi, and hence he believes that these pneumonias are dependent on degeneration of the vagus. He does not believe that they are induced by the swallowing of particles of food (*Schluck pneumonie*).

Here, then, is a record of 152 cases, in most of which disease of the vagus preceded pulmonary phthisis, or some other form of pulmonary dis-

ease. It may be urged, however, that in view of the general or local disease of the nervous system that coëxisted in these cases, there was reason to anticipate a lesion of the vagus, and the question may arise whether, in the ordinary form of pulmonary phthisis, not associated with any overt disease of the nervous system, a similar condition is found in the vagus. It seems to me, however, that this objection is more apparent than real, because all that the nervous origin of pulmonary phthisis demands is a showing that disease of the vagus is capable of engendering consumption regardless of whether this takes place in connection with well-recognized general nervous disease or not —I say with well-recognized nervous disease, for I am fully convinced that the majority of phthisical patients, if closely observed, would be seen to manifest well-defined symptoms of nervous disease. This opinion is substantiated by the pathologic research of Dr. Jappa (*Neurolog. Centralblatt*, 1888, Bd. vii, p. 425), who examined the peripheral nerves in the bodies of fifteen persons dead of pulmonary phthisis, and found marked degeneration in every case. He states that in these patients there were no nervous symptoms during life, except such as are found in almost all cases of the kind, as undefined muscle-pains, neuralgia, hyperesthesia, etc. Aside from all this, however, the testimony that I have been able to gather on this point demonstrates that the vagi are diseased in those phthisical subjects which are examined after death. Thus, Dr. Lewin (*Beiträge zur Pathologie der N. Vagus*, 1888), in a minute study of the ganglion of the trunk of the vagus in twenty cases of pulmonary tuberculosis, found it degenerated in every instance.

The foregoing facts, figures, and inductions establish, I think, the truth of the proposition that the link that binds pulmonary phthisis to insanity and to other neuroses is disease of the vagi. This connection furnishes a key to the problem why pulmonary phthisis, a developmental disease, should occur in organs that undergo no development at the time of greatest prevalence of the disease. It also shows why asthma should naturally be transformed into pulmonary phthisis; it furnishes the reason why pulmonary phthisis is at least three times as common among the insane as among the sane; and why it is about eight or ten times as prevalent among families burdened with either idiocy or hysteria in some of their offspring, as in those not so burdened. Indeed, this is precisely what the theory predicts and demands. It does even more than this. It explains why idiots die of pulmonary phthisis ten years earlier than healthy persons. This is accounted for by the fact that a depraved brain and nervous system, such as obtain among this class of unfortunates, offer less resistance to disease than a healthy brain and nervous system. On the same score it accounts for the fact that those that inherit pulmonary phthisis die three years earlier than those that acquire it. It offers at least a partial solution to the question why pulmonary phthisis is more prone to show itself in the insane, than is insanity to show itself among the phthisical. Insanity is an affection of the highest nerve-centers, and pulmonary phthisis, if this is granted, is an affection of the respiratory, and hence of the lower centers; pathology teaches that, as a rule, disease of the higher nerve-centers is more prone to implicate the lower centers than is disease of the latter to implicate the upper. The same law holds true of other neuroses. There are, for example, choreic and hysterical insanities; yet comparatively few choreics and hysterics are insane. Locomotor ataxia is associated with paresis, yet few typical ataxics suffer from insanity.

The view advanced furthermore explains why pulmonary phthisis is excited by many of the influences that give rise to insanity. In the differential etiology of pulmonary phthisis and insanity it appears that less depends on the nature and character of the causes than on the susceptibility of the organism on which they operate. For example, it is conceivable from what we know of this subject that the cause that gives rise to pulmonary phthisis in one individual may, by acting on another with an innate tendency to nervous or mental disease, generate asthma, hysteria, or insanity, and possibly pulmonary phthisis subsequently. So, in the same way it interprets why the age that is most productive of pulmonary phthisis should be between twenty and thirty. It is well known that grief, anxiety, disappointment, excessive mental and physical strain, alcoholism, syphilis, and excesses of all kinds are as potent factors in the production of pulmonary phthisis as they are of insanity. When man attains the age of twenty-five he falls a victim to pulmonary phthisis, not because there is a developmental change going on in his lungs, but because new functions have to be developed to assist him in adapting himself to another mode of life. He is confronted by civilization, with its education, knowledge and inventions; its diverse manners and customs; its changeable institutions; its rankling politics; its innumerable arts, sciences, and manufactures; its multiplicity of industries and employments; its burning life-struggles; its accompanying proneness to vices, excesses, and abuses of all sorts—all of which demand of him the exercise of the highest attainable mental qualifications in order to attain its standard and preserve his well-being. He is like an animal on which are imposed new conditions incidental to a succession of geologic changes, and to which it must adjust its organ-

ization in order to maintain its existence. His new environment is not of the same character as that of the animal, but its power is just as real and as great. The brunt of the battle at this time falls principally on his brain and nervous system, for they are the instruments through which he adapts himself to his new relations; and if from any acquired or inherited weakness these prove inadequate, he will fall in the combat.

In view of these premises, it is not to be wondered at that any influence that impairs the efficiency of the nervous system, no matter whether it is a mental or a physical strain, whether syphilis or poisoning from alcohol, mercury, lead, or brass, whether the virus of diphtheria, measles, scarlatina, whooping-cough, influenza, etc, will also be productive of pulmonary tuberculosis; although we must not overlook the fact that the disease is also generated by auto-tuberculous infection, by traumatism, and by the inhalation of stone-dust, and other particles of matter; nor is it surprising that those that are already burdened with a neurotic taint should go down first, and in the largest numbers; nor need we be astonished to learn that the aborigines of North America, Australia, and New Zealand are being decimated and exterminated by pulmonary phthisis in their unequal warfare with modern civilization.

I think that we are justified in concluding, then, that in genesis and in nature, pulmonary phthisis is so closely related to insanity and to the other neuroses that it may be regarded as one of the branches of the family tree to which they belong. In spite of the fact that occasionally there may be alternation or transmutation between these diseases, thus emphasizing their specific alliance to each other, we must bear in mind that there exists a constant and living difference between all of them. An individual does not become phthisical, insane, epileptic, idiotic, or asthmatic as a result of indifferent material and conditions, but because the inherited influences combine with the exciting causes in his environment and predetermine the variety of his affection; and so long as these remain constant, that long will his disease remain typical. No one is more conscious than I am of the imperfections and shortcomings with which the neurotic theory of pulmonary tuberculosis is here presented; and in order to compensate for this deficiency I shall, in closing, quote the pertinent and philosophic remarks of Dr. Clouston on this subject: "The coincidence of the maximum age of tubercular lung infection, and of greatest liability to one of the most important of the acquired insanities, that of adolescence, is a very striking fact, and taken together with the facts as to heredity, seems to show that if tuberculosis cannot itself be called a neurosis, it is in most cases dependent for its existence on a trophic neurosis, or has the closest affinity to it" (p. 92).

THE IMPORTANCE OF SURGICAL TREATMENT FOR LACERATION OF THE CERVIX UTERI.[1]

BY AUGUSTUS P. CLARKE, A.M., M.D.,
OF CAMBRIDGE, MASS.

THE opportunities now afforded the gynecologist in any case for studying the effect of laceration of the cervix uteri leave but little doubt that treatment is a most important subject for consideration. Experience has, however, demonstrated that the local application of the various agents that have from time to time been suggested as being remedial or beneficial is at best but a temporary expedient.

Whenever a laceration occurring at the cervix extends through the internal and external muscular tissue, the mucous coat lining the canal suffers materially from the violence. The *plicæ palmatæ*, which have been described under the term *arbor vitæ*, undergo serious disturbance in their relation to the other tissues with which they are connected. This condition often leads to congestion, thickening, and to induration of the parts involved and to more or less hypertrophy and malnutrition of the higher uterine segments, and to changed relation and to displacement of the lower cervical zone.

When laceration occurs at the cervix, not only are the muscular and the mucous structures injured, but the mucous glands that so freely abound in the uterine canal also become disturbed in their normal functional activity. It is especially in the cervix uteri about the *arbor vitæ* that the mucous follicles, which when in a healthy condition afford only moderate moisture for the maintenance of their function, pour forth an altered, perverted or diseased secretion. The arteries and arterioles entering into these structures often become preternaturally developed or enlarged; there will often be found a greater interlacing or anastomosing of these vascular structures. This condition may lead to more or less local edema, which the venules and lymphatics will fail to overcome. The structure of the uterine nerves, particularly those derived from the hypogastric and sacral plexuses, becomes so deeply involved that not only do the parts in immediate contact with the torn or injured surfaces become the source of much trouble, but all the tissues forming the uterine body may continue so heavily congested and become so thickened, indurated, and globular as to constitute that condition which has so aptly been termed subinvolution of the uterus. The treatment best adapted for the relief of the suffering that occurs in every such

[1] Read in the Section of Obstetrics and Diseases of Women, at the Forty-third Annual Meeting of the American Medical Association, held in Detroit, Mich., June, 1892.

case, according to my experience, is that afforded by surgical measures. The history of the following case illustrates in some measure the importance of such treatment.

Mrs. C., thirty-six years old, descended from good stock, was originally of sound constitution and in good health. Her *embonpoint*, though fair, was not excessive. She was a sextipara. The eldest child was eleven years old, and the youngest three years old. At the time I was first called, December 14, 1891, there had been a most profuse uterine hemorrhage. On my arrival I found that the patient was blanched; her pulse was exceedingly weak and easily compressible. The cardiac sounds were feeble and gave indication that there was some dilatation and perhaps fatty degeneration of the heart. The patient had for the most part been regular in her catamenial flow, though she had suffered at times from unusual loss of blood. There was no evidence in the history of the case to show that the patient was suffering from the effects of abortion or that she was pregnant, or at any time had ever suffered from a miscarriage.

A few days immediately preceding the date of my attendance she had been doing some extra household work and had attempted to lift some heavy articles of furniture. This may have been the exciting cause of the hemorrhage. Vaginal examination revealed that the cervix was patulous, that it was hard and unyielding, and that multiple cervical lacerations had evidently long existed. There was also an old perineal laceration, which might have contributed somewhat to her inconvenience. By tamponading with iodoform-gauze, the hemorrhage was brought under immediate control.

On the next day a thorough vaginal examination showed that there was subinvolution; the depth of the uterine cavity was six and a half inches; there was also cicatricial ectropium of the cervix to an unusual degree. For some days the use of the tampons was continued, though there was no further hemorrhage.

The patient subsequently suffered severely from facial and supra-orbital neuralgia, sometimes on the left side, and at other times on the right. She also suffered from right-sided sciatica, which from time to time became a source of much distress. Full and repeated doses of morphine and of other opiates often afforded marked relief; stimulants were well borne and were frequently required to overcome the narcotic effect of the soporifics. On December 22d, the patient suffered from a severe attack of gastralgia, which yielded only to morphine administered hypodermatically. Under careful regulation of diet and with the judicious use of stimulants the patient from this time forward gradually improved, though she was kept in bed in consequence of the local inconvenience from which she suffered whenever she stood or was in the erect position.

On February 3d, with the assistance of Dr. A. H. Tuttle, the patient was etherized and placed on the table for surgical treatment. All details of the operation were carried out under strict antiseptic precautions. The uterine cavity still measured six and one-half inches. This was first curetted; then the cervix was repaired. Aseptic animal sutures were employed. The mucous tissue of the lacerated perineum was then dissected up as far as the sulcus on each side; coaptation of the torn surfaces of the perineal tissue was effected by the employment of the same kind of aseptic animal suture. The deep sutures were first inserted; each layer of tissue was brought together in its proper order; last of all the edges were approximated by the buried suture, and the parts, united, were sealed with collodion and iodoform. The wound was protected by dressings to the cervical, vaginal, and perineal tissues.

The patient rallied well from the ether, though more than the average quantity had to be used to overcome all rigidity of the genital tract. The bladder was catheterized at regular intervals to prevent the repaired tissues from becoming contaminated by the discharge of the urine. The patient suffered very little from the effects of the operation; there was no elevation of temperature. She experienced some trouble from a return of sciatica, though this occurred on the left instead of on the right side. Neuralgia in the face and in other parts was at intervals complained of. The woman took nourishment and stimulants freely until the evening of the 12th of February, when she began to suffer from dyspnea; the pulse became irregular and the heart's action at intervals was labored. Though the patient was able to continue the use of nourishment and stimulants, she died during the evening of the fourteenth of February.

An autopsy was held twelve hours after death. On opening the chest the heart was found to have undergone more or less fatty degeneration; both ventricles were somewhat dilated; the left contained an ante-mortem clot. The lungs were congested. The liver gave indication that it also was undergoing fatty degeneration; the spleen, however, was normal. The right kidney was congested and was darker than normal; the left showed that marked organic changes had for some time been going on, and that it was approaching a condition of parenchymatous inflammation. At the cervix uteri, where the lacerated tissue had been brought together by the operation for repair, the parts were in a healthy condition; the line of union had nearly healed. The uterine canal also presented a healthy surface; it showed that all the fungoid granulations had been removed by the curetting. The uterus showed that there had taken place a rapid retrograde metamorphosis of tissue, for the canal itself now measured scarcely four inches in depth. Firm union had already taken place at the line of coaptation in the torn perineum. There was no indication of sepsis about the parts. The autopsy, which had been carefully conducted, did not give the slightest indication that there had been any septicemia or that any other morbid process had occurred as the result of the surgical measures undertaken for the patient's relief. The autopsy further showed that there was no pelvic or uterine tumor and nothing to indicate the existence of a carcinomatous growth, as had been suspected by some of her previous medical advisers.

In view of all the facts connected with the case, it seems fair to conclude that the cause of death was the excessive loss of blood that occurred immediately before my first visit. This loss of blood necessitated the horizontal position for a long time and must have hastened the degenerative changes that had before been insidiously developing. It is also fair to infer that had the operation for her relief been instituted before the lapse of so many years, during which she had suffered from hemorrhage and from other untoward symptoms, her life might have been prolonged.

In another case of cervical laceration occurring during labor, the patient suffered much from endocervicitis and from uterine hemorrhage. After coming under my care, she had intended to submit to an operation, but had delayed the matter, owing to a succession of cases of illness that appeared in her family. The patient suffered much from the subinvolution and from the local inconvenience whenever she travelled or was about the house. She had grown stout, but her flesh was soft from a lax habit of the body. Auscultation revealed that, though there was no distinct cardiac murmur, the two sounds were weak and that dilatation and fatty degeneration had begun to take place. Another severe uterine hemorrhage so prostrated her that she had to be confined for some weeks to her bed. She suddenly died from degenerative changes occurring in the cardiac tissue.

In this case there can be no doubt that had surgical measures been adopted for her relief before she had lost so much blood, the fatty degeneration of the heart's structure would not have been accelerated by the recumbent position, which she also from time to time was frequently enforced to assume. In cases in which the disturbance is greatest at the cervix uteri, operation for repair will often yield most favorable results. In such cases it is surprising to see how speedily the thick and indurated tissue at the cervix softens and relaxes under the influence of the stimulus imparted by operative interference. The venules and lymph-vessels, which seemingly had long since lost or suspended their function, almost immediately take on renewed activity.

In a case of cervical laceration to which I was recently called, there was but little that could be expected to be achieved by the adoption of surgical measures on account of the unusual hypertrophy of the tissues that had taken place, and also on account of the exhausted condition of the patient. The operation was, however, undertaken. I was happily surprised to find that I had succeeded in effecting much toward the reduction of the induration and toward bringing about restoration of the cervix.

In cases of cervical laceration before the structures become indurated or cicatrized, the ectropium or eversion of the tissues of the os uteri may be the chief indication for which surgical treatment is required. Eversion, when present to any great extent, almost always gives rise to much local suffering, especially when the patient assumes the erect position. Such a condition of the cervix is sometimes the cause of sterility; it often interrupts the marital relation.

In a case to which I was called in consultation some two and a half years ago, the tissues of the os uteri so projected forward as to give the impression to the medical attendant, when the examination was made without the help of the speculum, that a fetus at the period of four months or more had engaged in the cervical canal. This patient had been the mother of four children, during the birth of the last of which laceration of the cervix occurred. As a consequence of this injury she had had repeated and troublesome hemorrhages—apparently unassociated with the catamenial flow. This case had, under temporizing treatment, dragged on for upwards of three years. A resort to trachelorrhaphy was followed by marked amelioration.

Emmet, as is well known, long ago expressed his belief that nearly all cases of uterine epithelioma or cauliflower growth have their exciting cause or origin in laceration of the cervix uteri. According to Emmet the carcinomatous development arises from perverted nutrition, in Nature's attempt to repair the injury.

Professor Graily Hewitt, of London, and other eminent authors have expressed the opinion that injury to the cervix by labor is the predisposing cause of uterine carcinoma. In a case that has recently come under my care the history showed that there had been a cervical laceration dating back some ten years. The patient was forty-six years old, and a multipara. There had been considerable induration and eversion. From the history it could not be learned that carcinoma had ever appeared in her family. The patient for several months previously to the manifestation of carcinoma in the cervix uteri had lived in a family in which there were two cases of carcinoma.

In another case to which I was called, the patient was twenty-nine years old and a primipara. There was no evidence of malignant disease in either branch of her family. One year previously she had experienced the initial symptoms of carcinoma of the cervix. She had devoted much time to the care of a friend who was suffering from carcinoma of the breast. She had incurred a cervical laceration during labor five years previously. She experienced considerable inconvenience from the effects of the laceration, and had from time to time received

local treatment; no operation for repair of the cervix was, however, ever undertaken.

In many cases of laceration of the cervix the induration that takes place is limited to an exceedingly small section; the eversion may occasion but little disturbance. In such cases there may have been no arrest of the action of the absorbents that are engaged in the removal of the provisional material incident to pregnancy. In some cases of this class, it would seem that the occurence of laceration increases the activity of the absorbents, or at least helps to expose them to the agency of the *materies morbi* or to that of the disease-germs that at any time may gain admission into the vaginal introitus. As more evidence has of late been adduced to show that carcinoma in its various manifestations is a contagious[1] affection, a much stronger plea than heretofore can now be made in support of the advantages to be gained by resort to the operation for repair of the cervix in which laceration has occurred, though it be of a minor grade.

DISARTICULATION AT THE HIP-JOINT—A NEW METHOD OF CONTROLLING HEMORRHAGE DURING THE OPERATION.

BY H. W. BOONE, M.D.,
SURGEON TO ST. LUKE'S HOSPITAL AND LECTURER ON SURGERY IN THE MEDICAL DEPARTMENT OF ST. JOHN'S COLLEGE, SHANGHAI, CHINA.

MR. TREVES, in his manual of operative surgery, calls "this amputation the most serious the surgeon can be called upon to perform." Speaking of methods of controlling the hemorrhage, he prefers the anterior racket incision, in which no tourniquet is applied. He says of the external racket method, that the elastic tourniquet can be applied, and he gives many good reasons for commending it as an excellent operation. Up to the present time the two best methods for applying the elastic tourniquet to the limb have been those of Mr. Jordon Lloyd[2] and the method of Dr. Wyeth.[3] A recent article by Dr. Keen,[4] of Philadalphia, gives an interesting description of the use of Wyeth's method, together with details of the form of operation used by Dr. Keen.

In the method of Mr. Lloyd, "the ends of the bandage thus tightened must be held by the hand of an assistant." One needs a skilled assistant. He may be in the way, and his hand must not slip, as it is liable to do while the limb is freely moved about during the operation. Dr. Wyeth's method is certain, and the control of the hemorrhage is absolute. The drawbacks are the need of two stout steel pins, twelve inches long and one-fourth of an inch in diameter at the head, and the injury to the soft parts of the limb in thus transfixing it in two places.

The plan of securing the elastic tourniquet that I propose is as follows: Get a new pair of suspenders of non-elastic webbing, such as men wear to keep up their trousers. Surround the sound thigh at the groin with a soft handkerchief, folded to make a band, and which has been made antispetic. Put the knot on the outer side of the limb, pass two stout tapes, eighteen inches long, under this band in front, and also one behind the thigh. Fasten these loops of tape through the two button-holes in the front straps of the suspenders and the one button-hole at the back of the suspenders, on the sound side of the body. Lay the patient on his sound side; then put two tapes, about five inches apart, along the trunk and the back of the thigh that is to be amputated; keep them in place by the hands of an assistant, or by adhesive straps across them; lay two tapes, five inches apart, along the front of the thigh and abdomen, and keep them in position. Pure elastic tubing, half an inch in diameter, is then wound five or six times around the thigh, keeping it well up at the very highest point at which it can be applied; then secure by tying it. Take the two posterior loops of tape in the hand and tie one tape securely in each one of the posterior suspender-straps. Take the two anterior loops of tape in the hand; fasten them through the two front button-holes in the front straps of the suspenders, and then let the assistant tighten up the suspenders by drawing the straps through the buckles, while the surgeon is elevating the elastic tube from the body and drawing it further upward. In this way the surgeon can adjust the elastic tube to suit himself. It is firmly held; cannot slip, and it needs no assistant to look after it. He can slack up the tube and cut the tapes whenever he wishes to do so. In this way the punctures through the thigh are avoided. At the field hospital, after the battle, or in the country, where surgical appliances are not to be had, the surgeon who can get one pair of non-elastic suspenders and a rubber tube, or even a strong pair of elastic braces to wind around the thigh, is provided with all the apparatus needed for controlling hemorrhage during the operation.

I hope that practical surgeons will give this method a trial by applying the apparatus to some strong, healthy man. After they have applied it once or twice they will be able to judge whether or not this very simple plan would prove to be of real service in controlling hemorrhage during a disarticulation at the hip-joint.

---

[1] Guelliot and Arnaudet: L'Union Médicale, 1891.
[2] Lancet, Vol. i, 1883, p. 897.
[3] International Journal Surgery, July, 1890.
[4] THE MEDICAL NEWS, March 26, 1892.

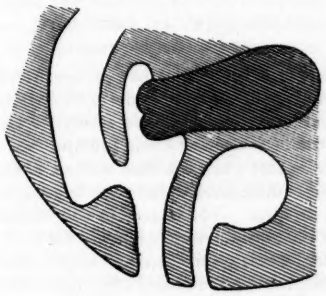
CLINICAL MEMORANDA.

REPORT OF A CASE OF ATRESIA ANI-VAGINALIS; SUCCESSFUL OPERATION.

BY THEOPHILUS PARVIN, M.D.,
PROFESSOR OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN IN JEFFERSON MEDICAL COLLEGE, PHILADELPHIA.

INSTANCES in which, according to the common expression, the rectum opens into the vagina, though infrequent, are not absolutely rare. Schurigius, for example, in his work, *Muliebra Historico-Medica*, Dresden and Leipzig, 1729, adduces several cases, derived chiefly from writers in the seventeenth century; and Garrigues (*American System of Gynecology*) states that Pooley has compiled thirty-eight cases. Auvard, from whose work, *Traité Pratique de Gynécologie*, 1892, the accompanying illustration, slightly altered, has been taken, designates the condition recto-vaginal fusion. This name

FIG. 1.



suggests a process of mal-development rather than the condition that really is present—an arrest of development.

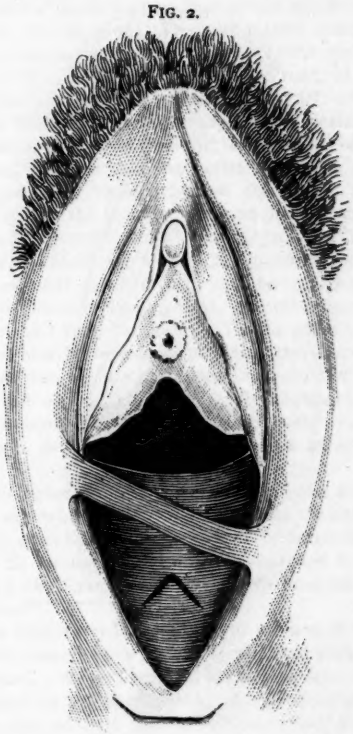
According to Kölliker, about the middle of the third month of intra-uterine life the orifice of the cloaca is divided into two—anal and uro-genital—though embryologists are not clear as to how the separation is effected. De Sinéty speaks of a proliferation of connective tissue situated between the intestine and the canals of Müller, which then open into the posterior wall of the allantoid; there is found a projection, which, little by little, elongates, advancing more and more to the exterior, in order to form the recto-vaginal wall, which isolates the rectum from the uro-genital apparatus, and its inferior part makes the perineum. The perineum is formed in the fourth month. Manifestly, therefore, the absence of the perineum—or, in other words, the opening of the rectum into the genito-urinary sinus—is not a malformation, but an arrest of development occurring in the latter part of the third or in the beginning of the fourth month.

The patient whose case is here narrated was referred to me by my friend, Dr. John H. Brinton. She had twice been operated upon—once in infancy and again at puberty—but unsuccessfully. What these operations were her friends could not inform me, and the surgeon who performed them has been dead some years. Probably the only vestige of an operation is to be found in a band stretching obliquely over the vulvar opening, and which is represented in one of the illustrations. The description of the condition presented by the patient has been written by Dr. Eads, resident physician in Jefferson Medical College Hospital, under whose care she was, and to whose assistance in the operation and assiduous and intelligent subsequent attention the success is largely to be attributed.

Miss E. L., twenty years old, a dressmaker, was admitted into Jefferson Hospital, November 6, 1891. The patient was very anemic. Menstruation began when she was thirteen years old; it was scanty and irregular. She had no evacuation from the bowels without a previous enema, and the movement was attended with pain. Purgatives acted unsatisfactorily, causing only slight watery discharges.

Upon local examination, the genital fissure was found to be abnormally long; the external genitals were apparently normal, except for a narrow band extending from

FIG. 2.

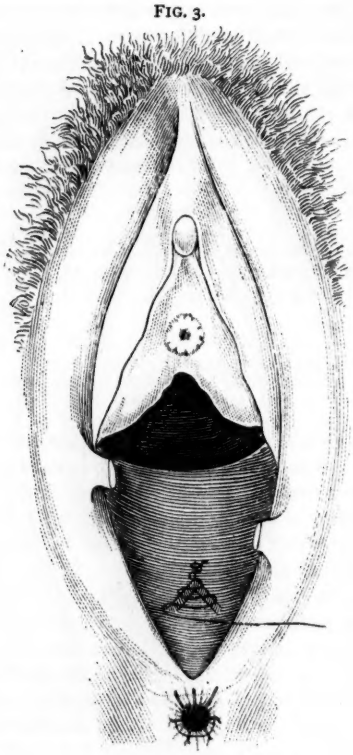


one labium majus to the other, about an inch and a half from the clitoris. There was no external opening of the anus. Within the posterior commissure, and nearly an inch above, there was an opening in the posterior vaginal wall in what appeared to be a capacious cul-de-sac; this opening was guarded by a triangular flap, the attached portion of which was broad, but the free extremity narrow and pointed. Upon introducing the finger into the orifice, a contracting sphincter was to be felt. Upon passing a probe into the opening, it penetrated above some eight inches, apparently coming in contact with the invaginated sigmoid flexure; but directed downward and pressed firmly, its bulb could be felt through the tissues externally.

The accompanying illustration shows fairly the appearance presented by the vulva and the lower portion of the vagina; it shows the band that has been mentioned and the unnaturally located anal opening. In addition, there is presented the first step in the operation performed for the relief of the abnormality.

In considering a suitable method of operating, it seemed to me that the great length of the genital fissure might be lessened by having a flap pushed forward at its posterior boundary. Acting upon this view, a transverse cut and two oblique cuts were made with scissors, these incisions being similar to, though shorter than, those made in Tait's operation for partial rupture of the perineum. It would have been better had the two posterior oblique cuts also have been made just as is done

FIG. 3.



by Tait s method. The transverse incision was carried upward posteriorly to the inferior portion of the rectum, and then completely around its vaginal opening. The next step was by means of tenacula to draw the anus down externally to the middle of the transverse cut; a continuous catgut suture united the anus with the skin, and, in addition, several interrupted silkworm-gut sutures were introduced. (The latter, but not the former, are shown in the illustration.) A continuous catgut suture was used to close the gap left in the vagina. The first operation was almost, but not quite, a complete success, a part of the anterior margin of the anus failing to adhere—a failure that was readily remedied by a re-denudation and suture. In a few weeks, the patient returned home, well. In March she revisited the hospital to tell me how well she was and to testify her gratitude for what had been done for her. She has gained twenty pounds in weight; menstruation is regular; the bowels move twice a day; the evacuation is painless, and there is complete control over gas and feces.

In conclusion, I believe that if the operation had been completely like that of Tait for perineal rupture, so far as incisions were concerned, the result in regard to size of perineum would have been better (the distance between anal and vulval openings is only about half an inch in this patient), for, with the resulting quadrangular surface, skin and subcutaneous tissues could readily have been drawn from the lateral boundaries of the quadrangle, so that the anterior flap would have been pushed further forward. So impressed am I with this theoretic opinion that, were a similar case to be presented me, I would employ the method outlined.

INJURIES TO THE HEAD.

BY WILLIAM M. LEWIS, M.D.,
OF LOS ANGELES, CAL.

WHEN I was a boy, ten years of age, I fell from a horse, fracturing my frontal bone in two places. The four-inch cut in the forehead was sutured—that was all of the treatment. Recovery was prompt.

Shortly after that I saw a soldier strike a comrade with his fist a blow immediately above the left ear, and death resulted in an hour. The treatment was venesection.

These two incidents, more especially the first, made an indelible impression on my youthful mind, and throughout my student and professional life I have tried to learn upon what the element of danger depends in cases of head-injuries. Bryant states that "all injuries to the head should be treated with extreme care, and *always regarded as serious.*" (Italics mine.)

I have read somewhere that no injury to the head is so slight but that there is danger, and none so grave but that there is hope. No rule or law can be laid down to govern these cases. Every case must be a law unto itself.

CASE I.—In 1885, J. D. was struck on the frontal bone, at the edge of the hair, by a companion, with a foot-adze (a cooper's tool). The result was a depressed fracture, nearly four inches long, and hemorrhage sufficient to occasion syncope. Two hours afterward, the depressed bone was lifted to its place, when arterial hemorrhage again threatened the life of the patient. Other means proving useless, the bone was allowed to press upon the brain and the bleeding ceased. The patient had not lost consciousness, except when he fainted. He was advised of his danger and put upon ergot and cold compresses. This treatment may be criticized as bad surgery, but the patient made an uninterrupted recovery, and is alive and well to-day, a deep depression being the only result.

CASE II.—In an altercation with his brother, T. M. was struck on the head with a small scaly rock, receiving a wound that bled only a few drops. No impression was made on the general system, and the patient paid no attention to his hurt. Twenty days afterward, inflammation of the diploë set in, and was rapidly followed by meningeal inflammation and death.

CASE III.—While engaged in compressing a radial artery of a small boy, severed in opening a fruit-can,

my attention was called to a street fight in front of my office; as I looked, a strong, muscular teamster plunged a pocket-knife into his adversary's brain, at a point near the junction of the sagittal and coronal sutures (bregma). The blade sank to the hilt, and in extracting it the assailant used all his power and wrenched it from side to side three times. When the three-and-a-quarter inch blade was finally withdrawn, arterial blood, in a solid column, flew high in air, and the victim sank to the ground unconscious. When I reached his side he was exsanguine and pulseless, and bleeding had ceased—in less than five minutes. A wound of the arm was sutured and the patient was taken to a hotel, stripped of his blood-soaked clothing, his head enveloped in iced cloths, and ergotine, gr. ij, administered hypodermatically. In six hours paralysis of the opposite half of the body was complete; the pulse reappeared at the wrist and signs of reaction set in. In eighteen hours the patient opened his eyes and asked for a drink of whiskey. During the three weeks of illness that followed, the paralysis gradually subsided and recovery became complete. Now, two years and a half after the reception of the injury, the patient is in perfect health, and smokes a strong pipe almost constantly. The amount of brain-tissue that was disorganized must have been considerable, and the loss of blood was measured by the capacity of the heart to pump it out. The man belonged to that innumerable throng around which no surgeon can place antiseptic precautions, while the opportunity for infection was constant; still he escaped.

CASE IV.—In play, a schoolboy, ten years old, was struck upon the head by a small falling rock which his companion had tossed into the air. There was no abrasion and very slight contusion. On the third day afterward, severe headache set in and continued. On the seventh day the usual symptoms of meningeal inflammation developed, and death closed the scene in less than three weeks from the day of injury. A reviewer might say that the traumatism and the fatal illness were merely coincident, but the impartial judgment of the physicians concerned in the case attributed death to the head-injury. Unfortunately no post-mortem examination was permitted.

CASE V.—J. M., sixty years old, while asleep in bed, was struck by an insane person two blows with an axe. The ball or blunt end of the axe was used, and the first blow landed on the side of the head, half an inch above the left ear. The sleeping victim turned partly over and received the second blow transversely across the forehead, an inch above the eyebrow. The entire arch of one eye was fractured loose and hung down nearly an inch lower than that of the other side. At least a tablespoonful of brain-matter had oozed from the gaping wounds and ran down on the man's face, and blood was flowing freely from both ears. Loose fragments of bone were removed, and the battered head was shaped up, and with a few stitches and strips of adhesive plaster the man was made moderately presentable. During the toilet, brain-matter was washed and wiped away freely. Deep stupor, with very shallow and slow respiration and slow pulse, continued for four days. The patient then showed slight signs of rallying, and after two months of illness made a good recovery—only a slight degree of mental impairment remaining four years afterward.

CASE VI.—A. C., thirty-five years old, was thrown from a buggy by a runaway horse. In addition to a cut on one foot and dislocation of two fingers, he received a wound about one inch long, some two inches above the inion, in the middle line. Upon washing the wound a stellate fracture was observed. No symptoms of internal injury were present; the patient was conscious and conversed freely. Convalescence seemed well established, and for three or four weeks not a symptom occurred indicative of any deep-seated injury to the head. At the end of that time mental aberration and motor and amnesic aphasia supervened. The usual symptoms of general diffuse inflammation of the meninges rapidly followed in succession. In consultation, it was decided not to trephine at the seat of injury, as the symptoms pointed to injury by *contre-coup* in the frontal lobes. The post-mortem examination disclosed a large abscess at the seat of injury and another on the upper surface of the right frontal lobe. Trephining and draining the posterior abscess would not have saved the patient.

CASE VII.—While riding along the road, M. W. was fired upon and received a bullet in the left side of his head, at the anterior inferior angle of the parietal bone. The post-mortem examination, made thirty-six hours afterward, showed that the bullet had been deflected downward, had passed through the brain, and had lodged against the temporal bone on the opposite side of the head. Notwithstanding this injury, the man dismounted, climbed over a fence, and pursued his assassin twenty or thirty yards, in fact until he received another bullet, this time in the abdomen. He then went back to his horse and rode two miles. To the physicians who attended him he repeatedly said that the wound in his head was insignificant. He remained rational as long as he lived, and never manifested the slightest symptom of brain-injury. The cause of the death was hemorrhage into the abdominal cavity from a severed small artery.

In this series of cases one feature is most noticeable, that is, that when hemorrhage was free the patients recovered, even though there was loss of brain-substance. Should all injuries to the head be regarded as serious? Should a physician treat every case of head-traumatism as serious?

A few weeks ago I was called to see a man who had received a severe blow on top of the head with a blunt instrument. When I reached his side he was vomiting, and plainly in a state of shock. I regarded the case as serious, and advised him to remain in bed five or six days. On the following day he went about his business. Of course, such a case proves nothing, but it indicates that the physician ought not to be precipitate in action.

I knew a surgeon who had made extensive preparations to do the operation of trephining for depressed fracture. With grips and boxes and bottles and assistants, he approached the house of the patient only to find that the latter had gone out of doors.

INTOLERANCE TO POTASSIUM IODIDE.

BY J. T. BRINGIER, M.D.,
OF BURNSIDE, LA.

F. G., thirty-eight years old, a mulatto, was ordered five grains of potassium iodide, three times daily. After

taking the second dose he was suddenly seized with intense pain in the forehead, eyes, and teeth, with hypersensitiveness in the area of distribution of the trifacial nerve.

There were also marked edema of the eyelids, injection of the conjunctivæ, lachrymation, and profuse nasal discharge.

All the symptoms abated within three days upon suspending treatment. When medication was resumed one week later, only half of the original dose being exhibited, the symptoms recurred, but in a modified form.

THERAPEUTIC NOTES.

The Management of Gout.—In a clinical lecture at the Vienna General Hospital, NOTHNAGEL (*Internationale klin. Rundschau*, 1892, No. 10) stated that the diet of the gouty patient may contain green vegetables and fresh fruits. Sugars and starches are to be avoided. A little meat may be allowed; white meats are preferable to red meats. Active physical exercise is to be encouraged; the action of the skin is to be stimulated by baths and friction. In the treatment of the diathesis alkalies and alkaline waters occupy a prominent place. The lithium salts, well diluted, are useful, permitting, as they do, the formation of soluble combinations of uric acid. Recently, with the same end in view, piperazin has been strongly recommended. In the attack, applications of cold or heat, blood-letting, fomentations of narcotic substances, ointments of opium, have in the past been employed; but these are now usually abstained from, as experience has taught that by energetic treatment the condition may be transformed into atonic gout; at most, inunctions with an ointment of cocaine are made. During the attack, the administration of an acid, like phosphoric acid, has been recommended; and in the intervals between attacks, sodium salicylate. Other remedies failing, colchicum may be resorted to in vigorous doses, conjoined with a narcotic, if warranted by the intensity of the pain.—*Centralbl. für die gesammte Therapie*, 1892, x, 5, p. 271.

A Modification of the Pasteur Method of Treating Hydrophobia.—MURRI (*Lancet*, 1892, No. 3588, p. 1231) reports the case of a healthy, robust man, twenty-two years old, who, after having been bitten by a rabid dog, placed himself under treatment by the Pasteur method of injecting subcutaneously emulsions of the medulla of inoculated animals. On the twenty-fourth day, however, symptoms of hydrophobia appeared. The subcutaneous injections were continued in doses of increasing strength, but without avail. It was, therefore, decided to have recourse to intra-venous injections. For several days, the condition of the patient remained unchanged. Then improvement slowly set in and continued until permanent recovery was practically assured.

Treatment of Carcinoma Uteri.—At a meeting of the Royal Society of Physicians of Budapesth, SCHULZ (*Wiener medizin. Presse*, No. 15, p. 598) reported satisfactory results from the treatment of carcinoma of the uterus by means of interstitial injections of absolute alcohol. From fifteen to thirty minims are injected daily. The patient need not be kept in bed. When the injection is attended with much pain, as when made in the cervix, a narcotic may be necessary. After the injection, the vagina is packed with iodoform-gauze, which is permitted to remain until the following injection. As a result of the treatment, the growth undergoes diminution in size, and pain, hemorrhage, and secretion are lessened. When the tissue has become so hard that it is difficult to introduce the needle, the treatment may be intermitted for the time being. Twelve cases have been treated in the manner outlined. Three have been relatively cured. The others were uniformly improved. The method of treatment is especially applicable when a radical operation is contra-indicated.

Lactic Acid as a Prophylactic in Gout.—BERENGER-FERAUD (*Journal de Médecine de Paris*, 1892, No. 15, p. 181) recommends the employment of lactic acid to prevent the gouty attack. To six hundred grains of the acid is added sufficient water to make a solution of twenty teaspoonfuls; each teaspoonful will thus contain thirty grains. Every morning a teaspoonful of the solution is added to two or three glasses of sweetened water and drunk in the course of the day. At the end of twenty days the medication is suspended for ten or twelve days, and then resumed. The treatment should be continued for several years. The remedy is inoffensive, and does not interfere with the digestion or the nutrition.

For Ozena.—

℞.—Sodium benzoate, Iodoform . . . āā ʒiij.
Tar . . . . . gtt. v.
M. et ft. pulv. Sig.—Insufflate.

℞.—Iodoform, Roasted coffee, finely ground } equal parts.
M. et ft. pulv. Sig.—Insufflate.

SCHNITZLER, *L'Union Méd.*, No. 49.

An Antiseptic Powder.—

℞.—Pulv. camphoræ . . . 5 parts.
Pulv. bismuthi subnitrat., Pulv. acidi salicylici } āā 20 "
Pulv. iodoformi . . . 55 " —M.
S.—As an application to wounds and ulcerous surfaces.

CAZOZZANI, *Rev. Gén. de Clin. et de Thér.*

For Fissures of the Tongue.—

℞.—Acid. carbolic . . . . ʒss.
Tr. iodi, Glycerini } . . . āā ʒijss.—M.
S.—Apply topically.

Prager med. Woch., No. 23.

Ipecacuanha as an Oxytocic.—Ipecacuanha is recommended as a stimulant of uterine contractions. Two or three doses of ten or fifteen drops of the wine in the course of ten minutes suffice to stimulate a sluggish uterus into energetic activity. *D. M. W., No. 25.*

THE MEDICAL NEWS.

A WEEKLY JOURNAL

OF MEDICAL SCIENCE.

COMMUNICATIONS are invited from all parts of the world. Original articles contributed exclusively to THE MEDICAL NEWS will upon publication be liberally paid for, or 250 reprints will be furnished instead of payment. When necessary to elucidate the text, illustrations will be provided without cost to the author.

Address the Editor: GEO. M. GOULD, M.D.,
1004 WALNUT STREET,
PHILADELPHIA.

Subscription Price, Including Postage in North America.

PER ANNUM, IN ADVANCE . . . . . $4.00.
SINGLE COPIES . . . . . 10 CENTS.

Subscriptions may begin at any date. The safest mode of remittance is by bank check or postal money order, drawn to the order of the undersigned. When neither is accessible, remittances may be made, at the risk of the publishers, by forwarding in *registered* letters.

Address, LEA BROTHERS & CO.,
NOS. 706 & 708 SANSOM STREET,
PHILADELPHIA.

SATURDAY, JULY 16, 1892.

THE PROPOSED REVISION OF THE CODE OF THE AMERICAN MEDICAL ASSOCIATION.

THE Committee on Revision of the Code of Ethics of the American Medical Association has before it a most important and responsible task. It doubtless desires all the light upon the subject that any and all can give it, and THE MEDICAL NEWS will gladly open its columns to short and pithy communications upon the subject. In order, however, to make our symposia valuable, we reserve, together with the privilege of opening the discussion and of bringing it to a close when we think the proper time has arrived, the further right to direct the discussion from time to time into special channels.

Thus, the fundamental question that must be decided before particular sections of the code, or particular methods of revision are discussed, is whether or not there shall be a code.

Our own view is, that for the present, being confronted with a condition, and not a theory, a code is necessary. We think, too, that it should be as brief and as pointed as possible.

However, there is much to be said on the side of "No Code." It is true that an honorable man does not need written statutes to tell him what he shall do and what he shall avoid, and, unfortunately, it is equally true that the letter of the written code often fails to hold the rascals. All are familiar with the fact that men whose aims and methods are in no essential particular different from those of the frank quack have acquired and maintain proud position and powerful influence in medical societies, conventions, and colleges. The argument drawn from this lamentable state of affairs is, that as the code has failed to prevent such triumphs of chicanery, it is useless, and that what is useless had better be abolished. In further advocacy of the abolition of the code, attention is directed to the medical officers of the United States Army and Navy, who are not subject to the code of the American Medical Association, but are governed by the military tradition that conduct "unbecoming an officer and a gentleman" is not tolerable; and the deservedly honorable repute of this picked body of men is offered in evidence of the elevating influence of the no-code practice.

Without desiring to forestall the more extended discussion we have invited, we must, however, briefly point out what seems to us to be the fallacy of both the arguments cited. It will certainly not be considered as an ungracious reflection on the medical officers in the service of the United States to call attention to the fact that the conditions of admission to that service are such that they who enter it may be justly considered a "GIDEON'S band;" and in view of their small number it is perfectly justifiable to further assert that from the ranks of the members of the American Medical Association in civil life—and thus subject to the code—a much larger body of men could be picked of equally honorable repute and blameless life.

But even more than this, the code under which military surgeons serve is far more stringent than that of the American Medical Association. We should gladly welcome an amendment to the constitution of the latter body providing that no one shall become or remain a member who may be guilty of "conduct unbecoming a physician," *if* we could only be certain that it would be enforced with the same rigorous certainty that attends the proceedings of courts-martial. Establish an efficient court-medical, clothed with plenary jurisdiction and power, composed of men as upright and as indomitable as the medical officers of the United States Army and their compeers in the leadership of the American Medical Association; support that court by fearlessly giving it work to do—and there is

work in plenty—and then, indeed, will a written code become superfluous. But this touches the very heart of the matter. The reason that the code has measurably failed to prevent dishonorable practices by clever dissimulators is for lack of efficient machinery to enforce its prohibitions, and for lack of courage on the part of honest men to set in motion even the cumbersome machinery provided. The power of Professor A, the influence of Editor B, are forces that we shrink from opposing, or we indolently and weakly prefer peace without honor, to the fatigue, vexation, and publicity of war for the preservation of honor. Let the weakest and most obscure—if he be a man of honor—invoke the penal provisions of the laws of any county society subject to the code, and Professor A's power will be broken and the influence of Editor B be as futile as it proved at Detroit when Philadelphia and Pennsylvania so frightened the nostrum manufacturers and their journalistic allies that, despite their wordy threats before the meeting, they dared not come out of cover when the challenge was thrown down. The greatest weakness of the no-code argument, however, is that it looks only at one side; it studiously shuts its eyes to the fact that, even as "hypocrisy is the tribute that vice pays to virtue," so the dissimulation forced upon Editor B and Professor A is a striking tribute to the deterrent influence of the code. It fails to note that men equally base, but less clever, are compelled to avoid many tempting byways of unprofessional conduct; and that even the master-minds of chicane are not bold enough to go so far as their desires would else lead them.

Utopia and the millennium may rejoice in the absence of penal statutes and police, but even Philadelphia would hardly be a desirable place of residence to-day if anarchy prevailed.

STERILIZED MILK FOR THE POOR.

UNDER the above heading the New York daily papers recently printed an appeal from "A Committee of Public-spirited Women" for contributions of money to purchase a larger sterilizing plant, to supply sterilized milk to the children of the poor. It stated that during the previous summer the Committee had entered upon the business of manufacturing, bottling, and distributing such milk at a price slightly below the cost of production, and had supplied 45,000 bottles to 575 sick children.

The appeal does not mention that these children had been benefited by the substitution of sterilized for natural milk, but appears to take for granted that the use of sterilized milk secures immunity from the summer diseases of children, and is a great boon and certain advantage.

It may, however, seriously be questioned whether such is the case. The opposite ground is taken in an important article recently published by DR. EDWARD P. DAVIS in the *American Journal of the Medical Sciences*. The disheartening results obtained in the artificial nutrition of the infants at the Philadelphia Hospital induced him to make a very exhaustive study of the results obtainable by the use of sterilized milk. The results at the outset, he states, when the food of the children was changed from common to sterilized milk, were very startling and gratifying. Many very sick children quickly recovered, and, for a time, that most perplexing problem—the artificial feeding of infants deprived of breast-milk—appeared to be solved. But later on, most serious and baffling disorders supervened. The children who at first had fattened and thriven on sterilized milk became emaciated and anemic; grave intestinal disorders, which resisted every form of medication and treatment, appeared, and finally, these sterilized-milk-fed children perished of non-nutrition.

In the same connection, an elaborate investigation by DRS. LEEDS and CONN, in the last report of the Dairy Commissioner of the State of New Jersey, is of much interest as throwing some light upon the causes of the great mortality alluded to. They find that the prolonged heating of milk to the temperature of the boiling-point of water brings about numerous changes in its composition and properties. The most important alteration is the conversion of the soluble albumin into an insoluble modification, which is difficult of assimilation and digestion. The trouble usually experienced when cow's milk in its natural condition is used in infant-feeding is that its curdy constituent cannot be digested. This difficulty is aggravated when the non-curdy portion, or soluble albumin, is thrown into a semi-curdlike state by strong heating.

These authors strongly insist that bacteria are not naturally present in milk, and that there is no proper excuse for allowing them to get into it. Their presence is mainly due to lack of cleanliness of the cow, the stable, the person milking and handling the milk, and of the vessels in which the milk is preserved and transported. The true remedy

is to be found in an organized system of official dairy inspection and sanitary milk-control. The inspection should begin with the cattle, and should determine whether they are tuberculous or otherwise diseased. The control should begin with the milk in the udder, and follow it all the way to the consumer.

The rapid growth of knowledge and public opinion will probably lead before long to our State Legislatures taking some steps in this direction. In the meanwhile LEEDS and CONN recommend that market-milk should be Pasteurized and not sterilized. Instead of heating to 212°, the temperature of milk during Pasteurization is brought only to 155°F. At this temperature the bacilli themselves are mainly, if not quite, destroyed; and, whilst the spores of the bacilli are more resistant and require the higher temperature for their destruction, the period of their development is delayed. Market-milk after Pasteurization keeps fresh and sweet for thirty-six or forty-eight hours longer than the same milk as at present handled. Most forms of disease-germs also perish under this treatment. As for those that are not killed, it is wiser to risk the remote contingency of their being present than to convert all the milk into an unnatural product in order to get rid of them. This is the view taken of the matter at the Philadelphia Hospital, where the Pasteurized has been substituted for sterilized milk.

REVIEWS.

A SYSTEM OF PRACTICAL THERAPEUTICS. Edited by HOBART AMORY HARE, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Assisted by WALTER CHRYSTIE, M.D. Vol. III. Diseases of the Skin; Diseases of the Nervous System; Diseases of the Genito-urinary Apparatus; Diseases of the Eye; Diseases of the Ear. With illustrations. 8vo, pp. 1352. Philadelphia: Lea Brothers & Co., 1892.

THIS, the third and last volume of the System of which it forms a part, bears out the promise of the first volume. In the completed work we have presented a mirror of modern therapeutic practice, reflecting great credit upon all concerned. The profession is to be congratulated upon having such a work placed in its hands. The various aspects of therapeutic medicine have been presented in a way such as they never have been before. The articles, as a rule, are representative of the most advanced therapeutics of the day. An encouraging feature lies in the fact that the recommendations for treatment do not consist in a mere recital of drugs, but that all means of treatment are given with laudable detail, and as far as possible the rationale accompanies the recommendation.

The present volume contains thirty-seven papers by different authors, dealing with a much larger number of sub-subjects. The limits of this review will not even permit of individual mention. The average value of the contributions is high. Evidences of lack of rigid scrutiny are here and there detectable. On page 231 we find *hydriatic* for hydriatric—a not uncommon error. We are not aware of any authority for the word *perls* on page 239. On page 256 the name *Captain* appears for Cattani. In the table of contents and on page 259 we find Amyotrophic Lateral *Paralysis*. On page 287, Dawbarn, referring to Loomis, is quoted as recommending "aconite as bleeding the patient into his own veins"; while on pages 1231 and 1232 Hare, *A Text-book of Practical Therapeutics*, is credited with saying that veratroidine "so dilates the blood-paths that a man is bled into his own vessels." On pages 316 and 317 the names Strümpell and Möbius appear improperly without the dieresis. The illustration of papillitis, on page 1011, is described as *pupillitis* with circum*pupillary* exudation. We doubt the wisdom of perpetuating the term "choreic" as descriptive of the movements seen in cases of infantile hemiplegia. Athetoid seems a preferable designation. These movements possess a peculiar vermicular character not observed in the jerky movements of chorea.

PSYCHO-THERAPEUTICS; OR, TREATMENT BY HYPNOTISM AND SUGGESTION. By C. LLOYD TUCKEY, M.D., Member of the Medico-Psychological Association; Membre Fondateur de la Société d'Hypnologie, etc. London: Baillière, Tindall & Cox, 1891.

THE author dedicates his book to Dr. Liébeault, of the Nancy School, from whom he imbibed a love of the study of hypnotism, and of whom he is an ardent admirer and an earnest disciple.

The fact that the present volume is the third edition of the work, the first of which appeared January 1, 1889, is strong evidence of the widespread interest taken by the profession in hypnotism during the past few years.

Dr. Tuckey holds that medical men who would give the subject a fair study should go to Nancy rather than to Charcot's clinic in Paris, where hypnotism is looked upon as a toy and not as a therapeutic agent of any value. The author submits (and we think with great reason) that in view of the fact that such high authorities as Charcot, Richet, Hack Tuke, Heidenhain, Krafft-Ebing, and Tamburini assert that hypnotism is a reality, it can no longer be doubted that the phenomena may actually be induced. At the famous school of Nancy it is claimed that any person can be hypnotized if the proper methods are employed and trials enough be made. The author admits that many evil consequences may follow the employment of the agency by ignorant and unauthorized persons, but claims that these dangers are insignificant when the measure is employed by educated physicians. The cures effected by it are, Dr. Tuckey believes, as permanent as those effected by any other means. Many readers will, however, doubtless take *cum grano salis* the statement that menorrhagia, moral depravity, neurasthenia, and sciatica have been cured by hypnotism.

Although the author is a strong advocate of the claims of hypnotism, it must be admitted that he has presented the matter very fairly, being animated by a

lofty scientific spirit. He is familiar with the works of all the writers upon the subject, as evinced by his frequent references. The *Revue de l'Hypnotisme*, a periodical devoted to the subject, is freely quoted. The work is a most interesting one and deserves to be widely read.

OUTLINES OF ZOÖLOGY. By J. ARTHUR THOMSON, M.A., F.R.S.E., Lecturer on Zoölogy in the School of Medicine, Edinburgh; Joint Author of the "Evolution of Sex"; Author of "The Study of Animal Life." With thirty-two full-page illustrations. New York: D. Appleton & Co., 1892.

IN these days of active biologic research, well-written handbooks in any department of biology are always in demand, and are always welcome. We have such an one in the very inviting little volume on zoölogy just published by the distinguished Edinburgh scientist, Professor Thomson. Tastefully bound, well printed and in clear, attractive type, with the text illustrated by over thirty diagrammatic figures on plates, this work at first sight cannot fail to please the eye of the student in the biologic laboratory. And, indeed, in its nearly 650 pages, rounded off with its admirably arranged index, our author has certainly succeeded in presenting in good, systematic, as well as scientific, style a very excellent outline of the subject of zoölogy as it is now understood by our best zoölogists. More important than all, the work bears the stamp of the mind of a practical teacher and an actual worker in the laboratory; in other words, it is not a closet-compilation, gathered together simply for the purpose of sale, but, as its author states in his preface, is to be used "as an accompaniment to several well-known works cited in the introduction, most of which follow other modes of treatment." We find the work to be morphologic as well as physiologic, founded upon the firm basis of the law of evolution, with the main characters of the principal types of living animals strongly defined and compared, the whole being frequently summarized, throughout its pages, in the most useful kind of tables. In its twenty-five chapters Professor Thomson has not neglected, too, to clearly touch upon such important points as paleontology, geographic distribution, and natural classification, all of which are tersely handled with great skill. Our space will not admit of a criticism in detail, but it will admit of our saying that the work before us is an able guide to the subject of which it treats, and that such few imperfections as it may possess another edition can easily eliminate.

SOCIETY PROCEEDINGS.

AMERICAN MEDICAL ASSOCIATION.

Forty-third Annual Session, held at Detroit, June 7, 8, 9, and 10, 1892.

SECTION OF DERMATOLOGY AND SYPHILOGRAPHY.

FIRST DAY—JUNE 7TH.

The Chairman, DR. L. D. BULKLEY, of New York, read an address on "Recent Advances in the Treatment of Diseases of the Skin," in which he reviewed the remedies recently introduced into dermato-therapy.

Reference was made to the employment of antipyrin in the treatment of neurotic eruptions and pruritus; of pilocarpine for forms of seborrheal disorder; of potassium iodide for psoriasis. The subcutaneous injection of mercury (especially the insoluble salts, as the salicylate) in syphilis was highly recommended.

DR. L. A. DUHRING, of Philadelphia, criticised the statement that in dermatitis herpetiformis no remedy is of value. He finds that sulphur is most useful. An ointment of sublimed sulphur and oil, in the proportions of 8 : 100 may be employed.

DR. RUSSELL, of Utica, N. Y., expressed the view that sodium salicylate is more valuable than antipyrin in the treatment of pruriginous affections.

DR. LOUIS A. DUHRING, of Philadelphia, read a paper on the "Treatment of Acute Vesicular Eczema," a disease, he stated, that is frequently seen by the general practitioner. The remedies used often aggravate the disease. The affection generally appears suddenly, and demands active local treatment directed to the relief of the congestion and the cell-proliferation. The mode of applying the remedies is the important factor. In acute erythematous eczema washes are tolerated better than salves, and pastes are more useful than salves. In acute vesicular eczema, mildly stimulating washes, followed by salves or pastes, are preferable to washes alone. "Rubbing in" and friction are usually harmful. The regulation of the distribution of the blood and lymph, and a direct, local sedative action upon the cutaneous nerve-filaments, are the two most important effects desired. One of the best remedies is modified black-wash, followed by the use of cloths spread with oxide of zinc ointment or paste, two or three times daily. The wash should be diluted with one or two parts of lime-water, and a little mucilage of tragacanth added. A solution of boric acid is useful, especially when the horny layer is absent. Weak resorcin or salicylic acid washes are soothing. A plasma of five parts of tragacanth, two parts of glycerin, and ninety-three parts of boiling water is tolerated when fats are objectionable. A lotion holding in suspension prepared calamine, ʒss; oxide of zinc, ʒss; glycerin, ɱxv; lime-water, fʒiv, and to which may be added resorcin, tincture of coal-tar, carbolic acid or ichthyol—all weak—is valuable. The best ointments are diachylon, freshly made from purest olive oil; oxide of zinc and bismuth; refrigerant "cold creams" containing water are also of service. Dusting-powders are not so useful. Cleansing agents should be used cautiously and sparingly. Rest, for the circulation of the fluids, is of importance, especially when a large surface is implicated.

DR. C. P. RUSSELL, of Utica, read a paper entitled "Eczema of Infancy and Childhood, with Special Reference to Etiology and Dietetic Treatment," which is to appear in a subsequent number of THE MEDICAL NEWS.

DR. OHMANN-DUMESNIL, of St. Louis, read the paper of DR. GEO. T. ELLIOT, of New York, on "A Note on Reflex Eczema in Infants." He stated that eczema of reflex origin occurring in infants is easy of recognition and susceptible of differentiation from eczemas of different pathologic origin. Its localization is most characteristic, occupying, as observed in over three hundred cases, invariably and in a symmetrical manner, both cheeks, rarely the scalp, and when on the extremi-

ties, occurring on the extensor surfaces and not on the flexors. The wrists and backs of the hands are frequently affected, but the trunk only exceptionally, and then in severe and protracted cases. The eruption is always in the form of circumscribed patches, constituted by the aggregation of numberless papules or vesicles, or papulo-vesicles, the aspect of the entire patch being herpetiform. The itching is most intense and leads to scratching and tearing. Etiologically, gastric or gastro-intestinal, or intestinal disturbances alone are found, or dietary irregularities, quantitative or qualitative, or dentition, or even slight cystitis, intestinal worms, etc.; in many cases an adherent prepuce acts as the exciting cause of the cutaneous process.

The eruption will vary in accordance with the presence or absence, removal or recrudescence of one or another of the reflex causes, this variation occurring from day to day or several times a day. At one time the eruption is almost completely gone, and a few hours afterward it recurs in its original intensity. If examined with care it will always be found that the relapse has been preceded by some return of the original reflex cause, or by the development of some new one. The cases originating from the condition of the prepuce are the most intractable, because little attention has hitherto been given to this as a cause, and because it is not suspected or looked for.

The importance of differentiating these cases from other cases of eczema lies in the indications for treatment. This latter is not represented by a specific, but has to be directed against every possible condition apparently or possibly acting as a reflex irritant. In consequence, the systemic health, the hygienic and dietary conditions of the child should be brought up to the normal, and every precaution should be taken to guard against the return of any disturbance, functional or otherwise. The remedies are indicated by the conditions existing, and should vary in accordance with the requirements presented, but in every case they are the same as would be used in the absence of a cutaneous eruption. When every reflex cause has been excluded, and only an adherent prepuce is found, this should, if possible, be stripped back; otherwise circumcision should be resorted to. The treatment is thus entirely directed to the removal of the reflex cause, and the local treatment is purely accessory and of minor importance. Salicylic acid, gr. x, ad ungt. zinc. oxid., ℥j, is as good an application as any. If there is much itching and only little weeping, liquid pitch, ℥j, or fluid extract of ergot, ℥j, may be added, oftentimes with benefit.

DR. L. D. BULKLEY, of New York, read a paper "On the Diagnosis and Treatment of Eczema Seborrhoicum."

In the discussion of the four preceding papers, DR. OHMANN-DUMESNIL, of St. Louis, Mo., stated that he believed eczema seborrhoicum to be dependent upon some constitutional condition. The eruption is most pronounced on the hairy chest of man, especially in the presence of excessive perspiration. The disease is probably an inflammation of the sweat-glands. A zinc salve will help only momentarily. Resorcin has been found useful.

DR. GARRY stated that he suffers with eczema seborrhoicum of the scalp, which disappears readily in cold weather on the application of a resorcin preparation, but in warm weather is more obstinate.

DR. BULKLEY stated that he has also noticed that eczema seborrhoicum seems aggravated by warm weather. It is probable that in warm weather the parasite on which the disease depends finds more propitious conditions for vegetation, perhaps on account of the perspiration.

DR. SHOEMAKER stated that he has found hamamelis, alone or in combination with water or glycerin, the best remedy in the treatment of vesicular eczema. In seborrhoic eczema constitutional treatment seems indicated, together with external applications.

DR. RICKETTS stated that in seborrhoic eczema he has had the best results from a 15 per cent. ointment of ammoniated mercury. The scalp may be rubbed with a stimulating lotion. An ointment of mercuric iodide, too, has likewise given excellent results.

DR. DUHRING expressed his doubts as to the entity of seborrhoic eczema. Many cases are improperly so called. Eczema is often complicated with seborrhea of the face and of the body. In some cases the eczema, in others the seborrhea, predominates.

Dr. Duhring referred to a case of seborrhea in which red plaques appeared on the face, cheeks, mouth; the patient never complained of any itching. The condition disappeared after a few local applications, but it soon recurred. Cases of this class are usually not cured, but only relieved. Seborrhea is not contagious, and is not dependent on the presence of a parasite. Eczema seborrhoicum is to be treated locally; it is likely to get well with the use of resorcin. Eczema, on the contrary, is not relieved so easily.

DR. RAVOGLI expressed the view that it would be well to do away with the name eczema and substitute another more expressive, such as catarrhal dermatitis. Nothing is gained by prefixing the adjectives erythematous, vesicular, pustular, etc. What is wanted is an adjective indicative of the etiology of the affection; thus, nervous, seborrhoic, tuberculous, parasitic.

Dr. Ravogli reported a case of nervous eczema in a man who had such an idiosyncrasy to tobacco that whenever he smoked a cigar an eczematous eruption appeared on the back a day later. Cases are of brief duration, but relapses are common. Not many remedies are required in the treatment. Applications of starch powder, repeated every few hours, are the most beneficial; in case the burning sensations and the inflammatory symptoms are very pronounced, applications of cold cloths wrung out of water containing a small proportion of lead subacetate are to be preferred. In cases of seborrhoic eczema, resorcin, from thirty to fifty grains to the ounce, is useful.

SECOND DAY—JUNE 8TH.

Morning Session.

DR. B. MERRILL RICKETTS, of Cincinnati, read a "Report of Forty Cases of Psoriasis Treated Exclusively with Arsenious Acid."

DR. DUHRING said that cases of psoriasis differ decidedly among themselves. Some cases of eczema are scarcely to be distinguished from psoriasis. Psoriasis

sometimes presents characters of an inflammatory process, and arsenic internally would aggravate the condition. In cases of universal psoriasis of a chronic type arsenic is useful. Many cases can be benefited without any internal treatment, reliance being placed only upon external medication. It seems a mistake to designate any remedy as a specific for psoriasis.

DR. CARRIER referred to a case in which pustules appeared, which, after a course of arsenical treatment, dispeared, and the lesions of psoriasis returned. Better results are to be obtained by local means than by internal medication.

DR. BEARDSLEY stated that he has tried copper arsenite with good results. He thinks a combination of both external and internal treatment the most valuable.

DR. RUSSELL reported good results from the use of arsenic in diffuse psoriasis. He proposed the employment of an ointment of ammoniated mercury or of mercuric iodide, of not too great strength, for external applications.

DR. HERR expressed the view that, despite the differences of opinion, the use of arsenic is very valuable in psoriasis. He referred to cases of psoriasis in patients whose nutrition was poor, in which arsenic rendered great service.

DR. SHOEMAKER stated that arsenic is a valuable remedy at times, but it is no specific. The selection of remedies in psoriasis depends upon the type of the disease and its cause.

In cases of psoriasis of an inflammatory type the internal administration of antimony has been very useful. In the chronic form of psoriasis, potassium iodide has given good results. Arsenic can be employed hypodermatically in large doses and also in the form of suppositories.

DR. BULKLEY stated that arsenic is very effective in bullous eruptions, as in pemphigus. To be effective the drug must be given in small doses frequently repeated. A drop of the officinal solution of potassium arsenite may be given every two hours. Chrysophanic acid and pyrogallic acid, mixed with collodion, act very quickly, and are to be recommended.

DR. CARRIER asked if chrysophanic acid acted only topically. He referred to a case in which he applied chrysophanic acid to one side of the body, and the eruption disappeared upon both sides.

DR. SHOEMAKER stated that chrysophanic acid is objectionable as a salve or in solution on account of its staining. Incorporated in soap it removes the scales, acts readily, and does not stain.

DR. RICKETTS, in closing, stated that he had not intended to present arsenic as a specific in psoriasis. The drug does, however, have some influence on the peripheral nerves; it increases the supply of blood and improves the nutrition of the skin. The hypodermatic administration is the most accurate and effective method.

DR. RAVOGLI, of Cincinnati, read a paper on "The Influence of the Nervous System on Certain Disturbances of the Skin."

After a brief physiologic consideration of the action of the vasomotor nerves upon the nutrition of the skin he pointed out how the nutritive process may be disturbed by these nerves, to which the efficient cause of many affections of the skin can be traced. The connection between the trophic nerves and the sensory filaments was dwelt upon, and the fact pointed out that lesions of sensibility of the skin often accompany angioneurotic affections.

DR. RAVOGLI reported three cases, upon which the paper was based, one of maculæ atrophicæ (liodermia), one of atrophy of the pigment (leukodermia), and one of sclerosis of the skin (sclerodermia). All three cases were in persons presenting derangements of the nervous system. The conclusion was reached that the affections were dependent upon the vasomotor nerves, as a result of derangement of the central nervous system. It was held that leukodermia, liodermia, and sclerodermia differ only in degree, but are alike in being atrophic processes, the first involving the pigment, the second the corium, and the third the whole skin.

DR. DUNLAP expressed the view that maculæ atrophicæ present great similarity to morphea.

DR. HERR referred to the case of a young woman, with epilepsy and discoloration of the cheeks, who could not feel the prick of a needle, and who suffered with cephalalgia. In a case of Addison's disease, the patient had no pigment on the hands. On post-mortem examination the suprarenal capsules were found degenerated. Dr. Herr concurred in the view that these diseases are the result of derangements of nutrition.

DR. DUHRING expressed his agreement with the views of Dr. Ravogli. There is no specific treatment. This must be varied to meet the requirements of the case. Dr. Duhring held that the sympathetic nerve is always involved in these cases.

DR. OHMANN-DUMESNIL referred to a case of leukodermia symmetricum in a woman with spinal anemia, and to one of periodic hyperhidrosis in a woman, as indicative of the influence of the symphathetic nerve. In another, atrophy of the skin and of the muscles developed in a girl after a severe burn. A case of warts and alopecia areata was likewise ascribed to nervous disturbances.

DR. BULKLEY reported a case of atrophy of the pigment of the head occurring after nervous disorders.

DR. DUNLAP, of Syracuse, read a paper on "Pemphigus Hemorrhagicus, or Purpura Bullosa," reporting a case of bullous eruptions, of chronic course, with repeated relapse. At first the bullæ were filled with serous fluid, which was subsequently replaced by bloody fluid. The bullæ were preceded by some redness of the skin. The patient did not complain of itching, but of pain.

DR. RAVOGLI commended caution in the diagnosis of pemphigus. Many cases that were called pemphigus are now recognized as dermatitis herpetiformis bullosa, Duhring. The diagnostic characteristics of dermatitis herpetiformis are polymorphism of the eruption, the presence of pruritus, the frequency of relapse, and the condition of apparent health. The case reported appeared to be one of pemphigus. The differentiation is of the greatest prognostic importance, when it is borne in mind that dermatitis herpetiformis is curable, while pemphigus is essentially fatal.

DR. RUSSELL expressed the opinion that, from the history of the case, the polymorphism of the eruption, the relapses, the redness appearing before the evolution of the bullæ, the case was likely one of dermatitis herpetiformis.

DR. DUHRING expressed the view that the case was one of pemphigus hemorrhagicus. Hemorrhage is not uncommon in connection with bullous diseases. Bullæ are sometimes connected with hemorrhagic diseases. Cases of pemphigus are very rare. In the case of a woman at the Philadelphia Hospital a bullous eruption appeared in relation with menstruation.

DR. BULKLEY stated that in New York bullous eruptions are designated as hydroa, while dermatitis herpetiformis is employed to include the atypical cases of vesicular eruptions. Such a case as that reported would be described as hydroa hemorrhagica. Dr. Bulkley would not call it pemphigus because of the failure of arsenic, and not dermatitis herpetiformis on account of the absence of pruritus.

Afternoon Session.

The following officers were elected for the ensuing year: *Chairman*, Dr. L. A. Duhring, of Philadelphia; *Secretary*, Dr. W. H. Dunlap, Syracuse, N. Y.; *Executive Committee*, Dr. L. D. Bulkley, of New York; Dr. D. A. H. Ohmann-Dumesnil, of St. Louis; Dr. A. Ravogli, of Cincinnati.

DR. RUSSELL reported "A Case of Acute Circumscribed Edema of the Skin."

DR. OHMANN-DUMESNIL referred to a case in a laborer who had his finger scratched, and on the following day presented cutaneous edema, which looked like urticaria, being whiter than the normal skin. He bathed the part with a solution of mercuric chloride, and in two days the edema disappeared. Cases of this kind are to be ascribed to an inflammatory process involving the lymphatic vessels, dependent upon a slight infection.

DR. DUHRING expressed the view that there is a close relation between urticaria and acute circumscribed edema.

DR. RAVOGLI stated that he had often seen edema of the skin limited to a certain region, especially of the extremities, but he always found that there was a certain degree of lymphangitis, while careful examination would disclose the presence of a scratch, or an abrasion, or a pustule.

DR. OHMANN-DUMESNIL, of St. Louis, read a paper on "Some Successful Methods in the Treatment of Alopecia and Alopecia Areata," which is to appear in a subsequent number of THE NEWS.

DR. RUSSELL read the report by Dr. Dunn of "A Case of Tubercular Adenitis, with General Alopecia and Pruritus." (See THE MEDICAL NEWS, July 9, 1892, p. 41.)

In the discussion of the two preceding papers DR. WILSON, of Kansas City, reported the case of a letter-carrier who lost the hair all over his body. By the use of pilocarpine in one-eighth grain doses, and electricity, the growth was, in a short time, completely restored.

DR. HERR stated that he has treated a number of cases of alopecia areata, some of neurotic origin; some of parasitic origin. He has at present under treatment a patient with alopecia areata, in which he is using carbolic acid by the method of Bulkley, with satisfactory results. From his experience he is inclined to believe that most of the cases are of parasitic origin.

DR. SHOEMAKER stated that he has found the application of massage and galvanism combined to yield the best results. He objects to the application of pure carbolic acid on account of the pain.

DR. RUSSELL stated that he has not seen many cases of alopecia areata, and most of these were of neurotic origin. He used the French method, rubbing with cantharidal collodion till vesication occurred, then applying a salve of yellow sulphate of mercury, thirty grains to an ounce of vaselin. In other cases he has used chrysophanic acid, thirty grains to an ounce of vaselin, with good results.

DR. DUHRING confessed his inability to distinguish a neurotic and a parasitic form of alopecia areata. He was not aware that he had ever encountered a case of parasitic origin. He places little reliance upon local treatment; the general nutrition is the principal point.

DR. RAVOGLI stated that if atrophy of the pigment and atrophy of the connectve tissue can be produced by disorders of nutrition, there is no reason why the hair should not fall out from similar influences. In most of his patients with alopecia areata a parasitic influence appears to be present. The presence of lanugo hair on the bald spots, with brittle hairs of dark color scattered in tufts over the surface of the scalp, and the unbearable itching, suggest a parasitic origin. In treatment any strong parasiticide is useful. Dr. Ravogli has, with good results, painted the spots with tincture of iodine, rubbed them with crude coal-oil, washed them with a strong solution of sublimate, with glacial acetic acid, treated them with oleate of mercury, and many other antiparasitic remedies. The best results in these diseases is to be obtained by the use of the forceps, removing the lanugo hairs and the stumps of the broken hairs. Most cases of common alopecia are due to the presence of seborrhea, alopecia pityroides. The general nutrition is often impaired. In these cases the application of resorcin is of great advantage, while the tincture of tar will bring the skin back to its normal condition.

DR. BULKLEY stated that a good deal of alopecia is dependent upon seborrhea and is readily corrected by the use of resorcin, from 5 to 6 per cent. in water or alcohol. In every case of alopecia, phosphates and milk are to be given. In cases of alopecia areata in which broken hairs are found, there is no doubt that parasites are present. When alopecia areata is found among several members of the same family this fact is not to be ascribed to contagion, but to exposure to the same hygienic conditions. In alopecia areata Dr. Bulkley paints the spots with pure carbolic acid, repeating the application once a week. This does not produce any considerable pain, and the patients never object to it. The absence of pain is an argument in favor of a neurotic origin. Internally strychnine and phosphoric acid in considerable doses are administered.

DR. OHMANN-DUMESNIL stated that he has applied carbolic acid over an area of ten square inches on the scalp in a case of alopecia areata, without producing much pain, repeating the application twice a week, without any objection on the part of the patient. Parasitic alopecia areata is to be distinguished by the presence of a round area, with small scabs and thin, brittle hair.

THIRD DAY—JUNE 9TH.

DR. W. F. BREAKY, Ann Arbor, reported a "Case of Lupus." The patient was a woman with lupus on the

cheeks and on the nose. Tuberculin was used in treatment. The first injection contained five milligrams, and was followed in eight hours by a temperature of 102.4°, a pulse of 120, and marked local reaction. A second injection was given six days later, and was followed by a temperature of 103.6° and a pulse of 120, with more marked local reaction, with effusion and exudation on the nose and cheeks. After the injections there was some improvement, but subsequently the lupus was worse.

DR. ATKINSON, of Baltimore, stated that there is no doubt that tuberculin has a powerful influence on the tuberculous process, and the results of its employment are rather encouraging. There is no agent that possesses a like power. It seems reasonable to hope for a specific treatment for tuberculosis.

DR. DUHRING stated that his experience with tuberculin has been limited and unsuccessful. He reported the case of a woman, thirty-five years old, with patches of lupus on both cheeks, on the nose, and extending to the throat. The tuberculous infiltration not only involved the corium, but also the subcutaneous tissues, so that it was impossible to pick up the skin in folds. As it appeared that nothing could be accomplished by local treatment, inoculation with cultures of erysipelas were used. The experiment was a failure; no reaction took place. The ordinary superficial patches of lupus can be scraped off and recovery secured, but when the infiltration is deep and extensive, injections become necessary.

DR RAVOGLI related the case of a man with lupus who had been treated in the Marine Hospital in Washington. He took over one hundred injections; not only was there no improvement, but he was actually worse. On the other hand, Dr. Kramer, of Cincinnati, presented to the Academy of Medicine a case of lupus vulgaris in a tuberculous patient that had been treated with tuberculin. At different times various local applications had been made, but without result. Finally the employment of tuberculin was begun, an injection of from one to five milligrams being given every two or three days. The improvement was speedy and decided.

DR. HERMAN GOLDENBERG, of New York, read a paper entitled "Chancre of the Finger, with Special Reference to Adjacent Adenopathy." He related that in some cases of chancre of the finger that he had observed, and that he had found reported in the literature, the axillary glands were enlarged, while the epitrochlear glands were not affected. This appears strange if it be considered that the syphilitic virus spreads by the lymphatics; it would be expected that in all cases the epitrochlear lymphatics should be enlarged.

Lewin, of Berlin, has given an explanation that the deeper lymphatics enter the axillary glands, the superficial ones the epitrochlear glands. Following the description given by Sappey in his elaborate work on the lymphatics, the conclusion was reached that Lewin's theory is not correct, but that the lymphatics of the first three fingers, as a rule, enter the axillary glands, while those of the fourth and fifth fingers terminate in the epitrochlear glands. It is therefore to be expected that in chancre of the fourth and fifth fingers epitrochlear swelling will be found the rule, and not the exception.

DR. RAVOGLI reported a case in which a chancre appeared beneath the nail of the third finger of the right hand. When first observed, there was a pronounced maculo-papular eruption all over the body. The ganglia were universally swollen and the epitrochlear gland of the arm, corresponding with the infected finger, was hard and palpable, while that of the other side was scarcely perceptible. In another case a chancre was found on the inferior portion of the second phalanx of the thumb of the right hand, in a man in whom, from keeping the hands in water, a fissure had formed on the thumb. He also had a maculo-papular eruption, with enlargement of the ganglia. The epitrochlear gland of the corresponding side was enlarged and swollen.

DR. DUHRING reported the cases of two medical men who believed that they had acquired syphilis in surgical work. They had erythematous eruptions, but no chancre could be found. The eruption proved to be not specific.

DR. BULKLEY reported the case of a patient with gonorrhea, who likewise presented symptoms of syphilis. A chancre could not be detected until discovered on a finger, covered by a piece of plaster, the patient believing it only a simple scratch.

In another case, in a man with eczema and a fissure a little above the rectum, an extragenital chancre developed in the fissure. It appeared that the man had taken a sea-bath in a pair of drawers that had been previously used by another person.

DR. LYDSTON stated that it must not be overlooked that there is no syphilis without the preëxistence of a chancre. He related the case of a woman in whom a chancre developed upon the gum from the application of carbolic acid to a carious tooth by means of an infected instrument.

DR. LYDSTON read a paper entitled "Circinate Syphilide, with Report of a Case," which is to appear in a subsequent number of THE NEWS.

DR. DUHRING stated that among a large number of syphilitic patients he had met with many cases of this form of syphilide, especially among the lowest class of persons, with broken-down constitutions and addicted to alcohol. He expressed the view that the nervous system has a good deal to do with the production of this form. Psoriasis presents some similarity to syphilis circinata, especially when on the face and neck, and is to be considered in the differential diagnosis.

DR. BULKLEY stated that it is unusual to see such a form of syphilis in the course of only four months. It may be that the nervous system is at fault.

DR. RAVOGLI contended that the division of the symptoms of syphilis into primary, secondary, tertiary, and quaternary is a mistake, conveying the impression that the symptoms follow one another in a definite succession. The best division is that of Virchow into an early and a late stage, the lesions of the early stage being characterized by inflammatory symptoms, and those of the later stage by infiltration and new growth. Circinate syphilide is but a nodular form, in which small nodules are situated closely together in groups, disposed in half circles or in circles. In the case reported there was probably also a seborrhea, in consequence of which thick crusts formed. The form observed about the hands was nothing else but a psorasis palmaris, of which there are two forms, one papular and the other ulcerative. The circinate forms of syphilis and psoriasis

palmaris are usually obstinate to treatment. Dr. Ravogli stated that he had obtained beneficial results from the use of a bath of corrosive sublimate, the hands being kept in a solution of 1 : 1000 for about one hour daily.

DR. EDWARD PREBLE, of Cleveland, presented a paper "On a New and Practical Mode of Grouping Affections of the Skin, with a Brief Analysis of One Thousand Cases." The following classification was proposed:

I. Deformities (anomalies of embryonal and trophic origin, and secondary acquired and artificial malformations).

a. Redundancies. 1. Simple diffuse hypertrophies (ichthyosis, keratosis, pilaris, hypertrichosis, lentigo, telangiectasis, etc.). 2. Nevi (vascular and non-vascular). 3. Benign tumors (fibroma, lipoma, angioma, steatoma, etc.).

b. Defects. 1. Simple defects or atrophy (albinismus, leukoderma, alopecia, rugæ, atrophia senilis, etc.). 2. Qualitative atrophies and dystrophies (colloid degeneration, myxedema, xanthoma, scleroderma, etc.).

c. Secondary and artificial deformities (cicatrices, pigment-deposits, tattoo-marks, argyria, melasma from malaria, etc.).

d. Persistent anomalies of function (livedo, hyperidrosis, comedones, xerosis, etc.).

II. Injuries (acute dermatitides, acute angio-neuroses, rashes, etc.).

a. Causes external. 1. Inanimate cause (effects of mechanical irritation, chemical irritation, heat and cold, etc.). 2. Animate cause (all forms of suppuration, phlegmon, furuncle, whitlow, impetigo, ecthyma; and initial lesions of specific inoculable diseases, erysipelas, glanders, charbon, vaccinia, chancre, etc.).

b. Cause internal. 1. Reflex source (pruritus, urticaria, etc.). 2. Toxemic source (exanthemata, scarlatina, variola, varicella, etc., drug-eruptions, erythema multiforme, erythema nodosum, herpes iris, pemphigus, purpura, etc.). 3. Neuritic source (herpes zoster and kindred affections). 4. Hidrotic source (lichen tropicus, sudamina).

III. Diseases.

a. Local origin. 1. Occupation-dermatoses (corns, callus, professional eczemas, etc.). 2. Parasitic diseases (scabies, pediculosis, favus, tinea tricophytina, verruca vulgaris, molluscum contagiosum, etc.).

b. Cutaneous phenomena of general, chronic, infectious diseases (syphilis, tuberculosis, lepra, sarcoma, carcinoma, elephantiasis Arabum, etc.).

c. Diseases at present unclassified (etiology complex or occult). 1. Eczema (infantile, capitis, manuum et pedum, cruris, flexuarum, orificiorum, etc.). 2. Diseases located in the follicles of the skin (acne juvenilis, acne rosacea, acne cachecticorum, sycosis, dysidrosis, etc.). 3. All other diseases (psoriasis, lichen planus, prurigo, etc.).

The relative frequency in one thousand cases was found to be: Deformities, 21 per cent.; injuries of local origin, 26½ per cent.; injuries of internal origin, 11½ per cent.; diseases of local origin, 13 per cent.; general diseases, 8 per cent.; diseases of complex or unknown etiology, 20 per cent.

DR. ELISHA CHENERY, of Boston, presented a paper entitled "Experiences with Scabies." He stated that scabies, though laughed at, is an important disease, made so by its active contagiousness, the difficulty of diagnosis and cure. He related the case of a clergyman who took a little girl from a poor-house, and through her transmitted the itch to nearly all of the good families of his parish, embracing parts of several towns. A well-to-do family had scabies from grandmother to baby, and spread the disease because their wealth and station set them above having the itch.

To be successful, the treatment of scabies has to be followed up to all of the affected persons and their infected clothing.

Forty years ago the disease was rare in Boston. Now it is annoyingly present, especially in the low foreign quarters, where it is so firmly entrenched that it is next to impossible to dislodge it. It, therefore, becomes the duty of the Board of Public Health to devise means to thoroughly stamp it out. Its removal is more than the physician, single-handed, can do; so the matter becomes one of public interest, and should so be regarded and treated.

DR. W. H. RIGHTER, of Topeka, Kansas, presented a "Report of a Case of Verruca Papillaris of the Upper and Lower Lips." The case was that of an Englishman, fifty-five years old, who presented large warts or verruca papillaris upon the lips. The lower lip was completely covered with warts, and upon the upper lip there were two large ones. The growths had begun to appear at the age of eighteen, and at the age of twenty-one they were fully developed. The man considered his condition a deformity and an annoyance, and was anxious to have the masses removed. After a week's treatment with the stick of silver nitrate, applied daily, the warts had disappeared, and in another week the lips were restored to their normal appearance.

CORRESPONDENCE.

QUACKERY IN THE TREATMENT OF ALCOHOLISM.

To the Editor of THE MEDICAL NEWS,

SIR: In view of the position taken by you in such matters, I enclose circulars of the Plymouth Institute, of Warsaw, Ind., an institution which, by a three weeks' course of treatment with the "Borton Cure"—"rum's new foe"—originated by Dr. T. A. Borton—guarantees a perfect cure for the liquor and morphine habits. The company modestly claims: "We never fail to effect a cure, no matter how bad the case may be." One point upon which stress is laid is that the patients constantly have access to whiskey, with, nevertheless, "the *positive assurance* that the appetite for it will not outlast the *third day* of treatment."

One evening recently, while Dr. Borton and an agent of the institute, a Mr. Cooper, were in this city for the purpose of starting a branch here, I had an opportunity, with a small company of gentlemen, of meeting them. The conversation became quite interesting and instructive, but did not succeed in developing the enthusiasm and admiration for this institution that was, I suppose, expected.

Dr. Borton stated that the Plymouth Institute has been in operation about two years, and is having a large

patronage. His remedy for the liquor habit he claimed to be a specific, acting by causing in three days such disgust at the taste and sight of liquor that an unconquerable and permanent aversion is created; by some magical effect the taste of these beverages (but not of any other article of diet) is made so disagreeable—"at first as if pepper had been put in"—that the habit is for this reason at once abandoned. The ingredients were stated to be such as could be obtained at any drug-store on a prescription. General treatment is also given. Great stress was laid on the point that the desire for liquor is a disease, not a habit, though how that theory or name helps matters is not clear to my unenlightened mind, as if a disease were necessarily easier to cure than a habit. The institute does not undertake the treatment of persons who are unwilling to be cured, while claiming 100 per cent. of perfect cures of inebriates who desire relief. Applicants with organic lesions advanced to any degree are also rejected.

The morphine treatment consists in the administration of a substitute for the opiates, both being subsequently withdrawn.

In answer to some pertinent questions Dr. Borton could give no valid reason why the medical profession generally could not or should not administer his remedy as well as himself. The most that he could claim was that a slight amount of special study and training were necessary to perfectly qualify physicians to employ his treatment, and that it required considerable personal attention and care, say three calls daily, which he professed to fear physicians would not give. He admitted that the remedy could be applied with ordinary professional skill; that it was only of average potency—stronger than many drugs, but not so strong as numerous others, and that its injudicious or inefficient application would result in no greater harm than the careless administration of many other drugs.

It was suggested that, if his treatment, as he claimed, is or could be made so powerful an agency in diminishing intemperance and its evils, the usefulness to humanity of "rum's new foe" would be vastly increased by publishing it for the use of the whole medical profession, and so making it more generally accessible to the masses suffering from the physical and moral demoralization of alcoholism, and that under these circumstances, keeping the remedy secret for the purpose of holding a lucrative monopoly, thereby contracting its sphere of alleged usefulness, was quite shamefully selfish and decidedly unphilanthropic. On being pushed with these suggestions Dr. Borton seemed embarrassed, or ashamed, and had but little to say. What he did say was to the effect that his course was not, to be sure, quite professional; that his conscience was not quite easy in the matter; that it was a tender subject with him, and that he didn't like to talk about it.

To the suggestion made in his behalf that a person is entitled to the rewards and profits of his inventions and discoveries, it was replied by the gentleman who principally had been showing up Dr. Borton's real motives, and who has been Commissioner of Patents, and is not a physician, and whose opinion on this subject, therefore, deserves great weight, free from any suspicion of prejudice, that the inventions for which the patent system secures certain privileges and rewards are especially mechanical appliances which are not essential to the happiness and well-being of mankind, but are simply additional material conveniences and luxuries; but that, while it is proper to thus encourage such inventions, yet the case is entirely different with agencies that can profoundly affect the issues of life and health (especially those that have such a promise of power and beneficence for the moral and physical well-being of humanity as was claimed for the "Borton Cure"), and no monopoly should be allowed; no restrictions whatever placed in the way of the freest and broadest dissemination and usefulness of such agencies. The gentleman referred to said that he would willingly contribute liberally toward rewarding Dr. Borton for his discovery and helping him disseminate it through the land; but not one cent would he give to send anyone to the institute, and so encourage him in such a monopoly.

This man, therefore, by his own admission, shows that the high-minded philanthropy which he and his like profess and parade is entirely an advertising sham. While no one can prevent them from trading upon men's physical and moral weaknesses, yet their motives should be shown up to the world in all their base selfishness; that their object is not at all benevolence and charity, but solely selfish financial gain at the expense of the great mass of inebriates. There are thousands of temperance-workers who are devoting their time, energy, money, and lives to diminishing the evils of intemperance, and they are doing this unselfishly, gratis, entirely for the good of mankind. A true humanitarian would scorn or never dream of using for purposes of gain a panacea for drunkenness which he might discover, but would give it free to all the world, carrying out the principle that salvation is free. The (alleged) salvation for body and soul offered by the Plymouth Institute comes only at a good round sum.

Respectfully yours, J. BEN NICHOLS.

1419 HOWARD AVENUE, WASHINGTON, D. C.

ALCOHOLISM.

To the Editor of THE MEDICAL NEWS,

SIR: Alcohol, in whatever form, either diluted with water, as in whiskey or brandy; or in a solution with water mixed with grape-constituents, as wine; or in the form of fermented liquors made from malted grain, as beer and ale, acts in all of its combinations in the same way, producing the same physiologic effects, which vary in accordance with its proportion. Hence, in speaking of the effects of the use of alcohol, all the members of this group that contain it are included.

Alcohol, when introduced into the stomach, causes a sense of warmth, which rapidly diffuses and is quickly followed by a general glow of the body. In moderate quantities, it increases the secretion of the gastric juice, and in that way assists the digestive power, stimulating the flow of blood, creating a superficial congestion of the mucous membrane, and soliciting a greater supply of the stomach-juices. Large quantities impair digestion by coagulating albumin. Taken in large quantities, alcohol precipitates the pepsin of the gastric juice and destroys its activity as a digestive agent. The habitual use of alcohol produces structural alterations in the stomach, seriously impairing the digestive power, so

that an abnormal quantity of mucus is secreted, and this acts as a ferment and keeps up a gastric catarrh, followed by pyrosis, regurgitation of food, heartburn, etc.

By its great power of diffusion, alcohol enters the blood directly from the stomach, without entering to any great extent the small intestine. The liver is consequently at once influenced by its presence in the portal vein. The functional activity of the hepatic cells is for the time being increased, and a more abundant glandular secretion follows. The first result of the overstimulation of the liver is an increase in size of the organ; but by over-work, the hepatic cells undergo atrophic changes and shrink. The liver becomes smaller, nodulated, and hardened; there results the condition known as cirrhosis or hobnailed liver.

In small doses, alcohol increases the action of the heart; in larger doses, excitement, exhilaration, and slight intoxication ensue; in still larger doses, it causes loss of muscular power, impaired coördination of voluntary movement, and rambling incoherence. In toxic doses, profound insensibility, stertorous breathing, and complete muscular resolution quickly follow. In small doses, all the functions are for the time being more energetically performed; but with the increased action of the agent, the functions of the system become disorderly and uncontrollable. In excessive quantities, the functions of the brain are suspended and complete unconsciousness ensues.

Alcohol has been discovered in the fluid contained in the ventricles, and has been distilled from the cerebral matter. As a result of the direct contact chiefly, but in part also from variations in the intra-cranial circulation, important structural changes are gradually wrought in the cerebral matter. The cells of the gray matter become more or less fatty and shrunken, the neuroglia undergoes hyperplasia, shrinking and condensation of the whole cerebrum ensue, and the cerebro-spinal fluid relatively increases. The objective evidences of these pathologic changes are seen in the impaired mental power, the muscular trembling, the shambling gait of the drunkard. These are a few of the many injurious effects of alcohol, to which may be added delirium tremens, hemianesthesia, epilepsy, paraplegia, amaurosis, etc.; and mental alienation, as asylum statistics show, has in the same agent its most influential cause.

A few well-known physiologic effects have been presented in this communication to show that the excessive use of alcohol is injurious. There are many addicted to the use of alcohol who say they desire to rid themselves of the appetite or disease. Alcoholism is, however, rather a result of habit than of disease, inherited or acquired; and the appetite for alcohol is wholly acquired. To be sure, its continual use will produce a diseased condition of the organization, structural and organic in character; but that derangement is not so much a disease known as alcoholism, as it is a direct destruction of tissues brought about by contact of the alcoholic poison with the organization for a continued length of time. The craving for the alcoholic excitation is not a disease, but a result of habit. This inordinate craving is what is commonly classed as a disease, the removal of which requires specific treatment. This habit is oftentimes induced by dyspeptic disorders, mental depression, or a sense of prostration incident to various diseases, and it is sometimes evidence of a constitutional idiosyncrasy. The power to resist it is impaired in proportion as the faculties of the mind are weakened by indulgence.

Alcoholism is a great curse, and any agent that will help to rid society of it is a good thing; but can any conscientious man, standing in the medical light of the nineteenth century, believe that Keeley, who holds his so-called cure a secret from medical men, and defies analysis, intelligently hopes to confer any real benefit upon humanity in his so-called gold-cure, or has any higher aim than the directing of the gold of the country into his own coffers?

There are few men who really desire to quit the habit of drinking; whose pleasure in drinking is not greater than their desire to reform. Any man, however, who really desires to quit the habit, and will make up his mind accordingly, can easily do so by exerting what little will alcohol has left him; by placing himself under the direct care of an intelligent physician, who will administer appropriate tonic treatment to support his system until it can depend upon the natural stimulation of good nutrition. He will then find himself just in the condition that Keeley or any other man need hope to leave his patient, who has his welfare at heart—only better off, not depending on any so-called cure, but with the knowledge of his condition before him, and knowing well that to falter is to fall.

This habit can only be overcome by sufficiently long total abstinence, together with measures directed to the removal of disorders and to the promotion of mental occupation and invigoration of the body and mind. There is no drug that has a special efficacy.

Respectfully, P. V. ELLIS, M.D.

GHENT, KY.

ATROPINE-POISONING AND THE "KEELEY CURE."

To the Editor of THE MEDICAL NEWS,

SIR: The following on criminal poisoning by atropine is from Blythe's *Poisons: Their Effects and Detection*, vol. ii, p. 341: "Criminal poisoning by atropine in any form is of excessive rarity in Europe and America, but in India it has been frightfully prevalent. . . . It was largely used by the Thugs, either for the purpose of stupefying their victim or for killing him; by loose wives to insure for a time the fatuity of their husbands; and, lastly, it seems in Indian history to have played the peculiar *rôle* of a State agent, and to have been used to induce the idiocy or insanity of persons of high rank whose mental integrity was considered dangerous by the despot in power. The Hindoos, by centuries of practice, have attained to such dexterity in the use of the 'datura' as to raise that kind of poisoning to an art, so that Dr. Cheevers, in his *Medical Jurisprudence for India*, declares that 'there appears to be no drug known in the present day which represents so close an approach to the system of slow poisoning believed by many to have been practised in the Middle Ages as does the datura.'"

Apropos of this is the report of an American physician, made to one of the medical journals within the past year,

that his son, as the result of an overdose of atropine, broke down mentally and physically, and died after an illness of about two years. He was rejected on application for a life insurance policy on the simple ground of the atropine-poisoning, and the examining physician adduced three other cases of atropine-poisoning in which the victims died in a few years.

These considerations would seem to throw a strong light on the cases of impaired health and lessened mental vigor of some of those who have gone through the so-called "Keeley cure." The physiologic action of the "cure" named is exactly in keeping with the idea that the active agent is atropine. After a few days' treatment the vision becomes blurred, the pupils dilated, the patient can no longer read ordinary print, and there is profound nervous depression.

The following quotation from Blythe may throw some light on the source from which Keeley drew his inspirations (*Poisons*, etc., vol. i, p. 10): "J. Baptista Porta, in his *Natural Magic*, published in 1589, gives a method *of drugging wine with belladonna root for the purpose of making the loaded guest loathe drink*."

There can be no doubt of the actual, though temporary, loathing often induced by the "Keeley cure," and as little doubt of its producing the physiologic action of atropine. In some who thereafter succeed in establishing a reasonable amount of will-power, the effect appears to give the requisite start in the right direction; I have consulted with men who had manifestly been rescued by this means from the drunkard's fate, and had maintained their self-control for years. There is reason to fear, however, that, with too many, the susceptible nervous organization that made them at first easy victims of the drink-habit compels them to succumb with equal readiness to the atropine—and the brain being more infirm after treatment than before, they lapse with increasing facility into drink, even if they escape the extreme mental disorder and the physical break-down of atropine.

The Keeley claim of 99 per cent. of permanent cures is doubtless based on the notorious habit of the drinker denying his vice; that a small percentage of recoveries occurs it is but candid to acknowledge. These occur, however, in those only in whom the natural mental power is vigorous, in whom the brain is little susceptible to the action of narcotics, and in whom a strong purpose of resistance can yet be aroused. For the majority of drunkards in whom the susceptibility to narcotics is very great, no permanent cure, or restoration of the will-power so as to control the appetite, can be expected.

If these conclusions are correct, it would appear that the reckless use of this most dangerous drug on a susceptible class of persons should make the administrator responsible for all the evil results, mental and physical, that follow. Were this agent used straightforwardly under its own name, the patient and his friends would be in a position to protect themselves against a poison so redoubtable; but, when used under a false name, it seems as if a cause would lie very strongly against the Keeley doctors, and especially against Dr. Keeley himself.

Respectfully yours,

JAMES LAW, F.R.C.V.S.

CORNELL UNIVERSITY, ITHACA, N. Y.

NEW ORLEANS.

Death of Dr. T. G. Richardson—The New Orleans Polyclinic.

PROF. TOBIAS GIBSON RICHARDSON died in this city on Thursday, May 26th, at the age of sixty-five. He had been in poor health for three years, but his last illness was very short. He was Dean of the Medical Department of Tulane University of Louisiana for twenty years, and one of its professors for thirty-one years. At the time of his death he was Emeritus Professor of Surgery. He was elected President of the American Medical Association in 1879, and was an honored member of the Orleans Parish and State Medical Societies. He was noted for his charity. The city of New Orleans has lost one of her most prominent and best citizens, and her physicians have lost an honored and enthusiastic friend. The Orleans Parish Medical Society attended the funeral in a body.

The New Orleans Polyclinic has applied to the State Legislature for equal privileges with Tulane University in the Charity Hospital.

INFLUENZA AND CHOREA.

To the Editor of THE MEDICAL NEWS,

SIR: I see in your issue of May 7th a report of a case of influenza followed by choreic movements in an old lady of sixty-five. My father and myself had a similar case in January of the present year, the lady being seventy-five. The movements were in the right upper extremity and head, and were at times quite violent, so much so as to cause great soreness of the muscles of the neck.

The movements lasted about three weeks and then gradually subsided, the old lady having an uninterrupted convalescence, with the exception of an attack of phlegmonous erysipelas involving the lower lip.

We treated this case throughout with quinine, phenacetin, and stimulants, using iron also during the attack of erysipelas. Inasmuch as the case reported died, I thought this case ending in recovery might be of interest.

Very truly, F. SALE, M.D.

BEDFORD, VA.

NEWS ITEMS.

The Mississippi Valley Medical Association will hold its eighteenth annual session at Cincinnati, October 12, 13 and 14, 1892. An address on Surgery will be delivered by Dr. Hunter McGuire, of Richmond, Va. An address on Medicine will be made by Dr. Hobart Amory Hare, of Philadelphia. The officers of the Pan-American Medical Congress will hold a conference at the same time and place.

BOOKS AND PAMPHLETS RECEIVED.

Disabilities of Old Soldiers. By John B. Crawford, M.D. Reprint, 1892.

Accidental Uretero-vaginal Fistula Following Hysterectomy. Cure by Kolpo-uretero Cystotomy, etc. By Nathan G. Bozeman, Ph.D., M.D. Reprint, 1892.

Special Bulletin of the Medical School and Law School of the University of Colorado.